SEQUENCE LISTING

<110> SPECHT, THOMAS
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SCHMITT, ARMIN
PILARSKY, CHRISTIAN
DAHL, EDGAR
ROSENTHAL, ANDRE

<120> HUMAN NUCLEIC ACID SEQUENCES FROM OVARIAN TUMOR TISSUE

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<212> DNA
<213> Homo sapiens

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<211> 552
<212> DNA
<213> Homo sapiens

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<210> 14

<400> 14
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<210> 15
<211> 993
<212> DNA
<213> Homo sapiens

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<210> 16
<211> 2273
<212> DNA
<213> Homo sapiens

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<210> 18
<211> 986
<212> DNA
<213> Homo sapiens

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<210> 19
<211> 526
<212> DNA
<213> Homo sapiens

<400> 19
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<210> 20
<211> 1765

<212> DNA
<213> Homo sapiens

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gcacacacat taagaaagca cacacactag gcttctagtt gggctaatta aaatctctat 180
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<211> 746
<212> DNA
<213> Homo sapiens

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aatactttag tattcttaac tatgtatgtg ccttctctta cactgagttc ttttttgctc 180
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<210> 22
<211> 659
<212> DNA
<213> Homo sapiens

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<210> 23
<211> 357
<212> DNA
<213> Homo sapiens

<400> 23
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<210> 24
<211> 890
<212> DNA
<213> Homo sapiens

<400> 24
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<210> 25
<211> 651

<212> DNA
<213> Homo sapiens

<400> 25
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<210> 26
<211> 1256
<212> DNA
<213> Homo sapiens

<400> 26
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<212> DNA
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<211> 1927
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<213> Homo sapiens

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<211> 672
<212> DNA
<213> Homo sapiens

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<210> 30
<211> 269
<212> DNA
<213> Homo sapiens

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<210> 31
<211> 604
<212> DNA
<213> Homo sapiens

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<210> 32
<211> 781
<212> DNA
<213> Homo sapiens

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<211> 304
<212> DNA
<213> Homo sapiens

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<210> 34
<211> 1528
<212> DNA
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<213> Homo sapiens

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<210> 36
<211> 1396
<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

<400> 38

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<213> Homo sapiens

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<211> 3552
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<213> Homo sapiens

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<213> Homo sapiens

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<211> 781
<212> DNA
<213> Homo sapiens

<400> 47

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<212> DNA
<213> Homo sapiens

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<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<211> 2017
<212> DNA
<213> Homo sapiens

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<210> 52
<211> 856
<212> DNA
<213> Homo sapiens

<400> 52
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<211> 540
<212> DNA
<213> Homo sapiens

<400> 53
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aatacaacat atctccggaa acccggcggg cgcaagcgag cggttggcca taagagccca 180
gctgaaacga gagtacctgc ttcagtacaa cgatcccaac cgccgagggc tcatcgaaaa 240
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cactcctaaa aactcactca tgggagctct gtgtggattt gggcccctca tcttcattta 360
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ataaatcatc tattaatcat taaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaagtcg 540

<210> 54
<211> 1912
<212> DNA
<213> Homo sapiens

<400> 54
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<210> 55
<211> 1962
<212> DNA
<213> Homo sapiens

<400> 55
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aaggatgcag ttgaggttga tccaggttta tccgaatgtg ctacctttct gagccttaaa 780
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ctaaaaatgt gaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aa 1962

<210> 56
<211> 1458
<212> DNA
<213> Homo sapiens

<400> 56
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ttggggtcca aattataa 1458

<210> 57
<211> 2188
<212> DNA
<213> Homo sapiens

<400> 57
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cccccccccc cccccccccc cccccccccc cccccccccc cccccccccc cccccccccc 180
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aaaaaaaaaa aaaaaaaaaa aaaaaaaa   2188

<210> 58
<211> 1548
<212> DNA
<213> Homo sapiens

<400> 58
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taataaaggt cttaaataat tgtctttgtg taaaaaaaaa gggaatat 1548

<210> 59
<211> 1254
<212> DNA
<213> Homo sapiens

<400> 59
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<400> 60
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<210> 61

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<210> 62

<400> 62
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<210> 63
<211> 954
<212> DNA
<213> Homo sapiens

<400> 63
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<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<211> 701
<212> DNA
<213> Homo sapiens

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<211> 817
<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<400> 71
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<210> 72
<211> 922
<212> DNA
<213> Homo sapiens

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<210> 73
<211> 870
<212> DNA
<213> Homo sapiens

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<211> 1418
<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<213> Homo sapiens

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<213> Homo sapiens

<400> 115
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ttcaagtcaa ccagtgttaa ccccggtgtg cttcctgcca gtctgttcct ccccatggga 120
gtcacacaaa atgaaaatct cctagaaaga gaagacaaag acccgcaaaa gatgtatgcc 180
accatctatg agctgaaaga agacaagagc tacaatgtca cctccgtcct gtttaggaaa 240
aagaagtgtg actactggat caggacttt gttccaggtt gccagcccgg cgagttcacg 300
ctgggcaaca ttaagagtta ccctggatta acgagttacc tcgtccgagt ggtgagcacc 360
aactacaacc agcatgctat ggtgttcttc aagaaagttt ctcaaaacag ggagtacttc 420
aagatcaccc tctacgggag aaccaaggag ctgacttcgg aactaaagga gaacttcatc 480
cgcttctcca aatctctggg cctccctgaa aaccacatcg tcttccctgt cccaatcgac 540
cagtgtatcg acggctgagt gcacaggtgc cgccagctgc cgcaccagcc cgaacaccat 600
tgagggagct gggagaccct ccccacagtg ccacccatgc agctgctccc caggccaccc 660
cgctgatgga gccccacctt gtctgctaaa taaacatgtg ccctcaaaaa aaaaaaaaa 719

<210> 116
<211> 494
<212> DNA
<213> Homo sapiens

<400> 116
gtcgataacg ccagacgcaa gacgccgggc ctacagcggg agcgtgagga aagccgtgcg 60

ttgcgttcca aggcatctgt gagcccgcgg agtatacacc atgagcaaag ctcaccctcc 120
cgagttgaaa aaatttatgg acaagaagtt atcattgaaa ttaaatggtg gcagacatgt 180
ccaaggaata ttgcggggat ttgatccctt tatgaacctt gtgatagatg aatgtgtgga 240
gatggcgact agtggacaac agaacaatat tggaatggtg gtaatacgag gaaatagtat 300
catcatgtta gaagccttgg aacgagtata aataatggct gttcagcaga gaaacccatg 360
tcctctctcc atagggcctg ttttactatg atgtaaaaat taggtcatgt acattttcat 420
attagacttt ttgttaaata aacttttgta atagtcaaaa aaaagtttgg tctcatctac 480
cttataatat ctgc 494

<210> 117
<211> 1065
<212> DNA
<213> Homo sapiens

<400> 117
acgcggctga ctacgctcaa agctccattg ttagatcctt tctgtcctcc ttcctggctc 60
ctccttcctc cccacccctc taataggctc ataagtgggc tcaggcctct ctgcggggct 120
cactctgcgc ttcaccatgg ctttcattgc caagtccttc tatgacctca gtgccatcag 180
cctggatggg gagaaggtag atttcaatac gttccggggc agggccgtgc tgattgagaa 240
tgtggcttcg ctctgaggca caaccacccg ggacttcacc cagctcaacg agctgcaatg 300
ccgctttccc aggcgcctgg tggtccttgg cttcccttgc aaccaatttg gacatcagga 360
gaactgtcag aatgaggaga tcctgaacag tctcaagtat gtccgtcctg ggggtggata 420
ccagcccacc ttcacccttg tccaaaaatg tgaggtgaat gggcagaacg agcatcctgt 480
cttcgcctac ctgaaggaca agctccccta cccttatgat gacccatttt ccctcatgac 540
cgatcccaag ctcatcattt ggagccctgt gcgccgctca gatgtggcct ggaactttga 600
gaagttcctc atagggccgg agggagagcc cttccgacgc tacagccgca ccttcccaac 660
catcaacatt gagcctgaca tcaagcgcct ccttaaagtt gccatataga tgtgaactgc 720
tcaacacaca gatctcctac tccatccagt cctgaggagc cttaggatgc agcatgcctt 780
caggagacac tgctggacct cagcattccc ttgatatcag tccccttcac tgcagagcct 840
tgcctttccc ctctgcctgt ttccttttcc tctcccaacc ctctggttgg tgattcaact 900
tgggctccaa gacttgggta agctctgggc cttcacagaa tgatggcacc ttcctaaacc 960
ctcatgggtg gtgtctgaga ggcgtgaagg gcctggagcc actctgctag aagagaccaa 1020
taaagggcag gtgtggaaaa aaaaaaaaaa aaaaaaaaaa aaaaa 1065

<210> 118

<400> 118
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<210> 119

<400> 119
000

<210> 120
<211> 648
<212> DNA
<213> Homo sapiens

<400> 120
ggactgcggt cgttagtctc cggcgagttg ttgcctgggc tggacgtggt tttgtctgct 60
gcgcccgctc ttcgcgctct cgtttcattt tctgcagcgc gccagcagga tggcccacaa 120
gcagatctac tactcggaca agtacttcga cgaacactac gagtaccggc atgttatgtt 180
acccagagaa ctttccaaac aagtacctaa aactcatctg atgtctgaag aggagtggag 240

gagacttggt gtccaacaga gtctaggctg ggttcattac atgattcatg agccagaacc 300
acatattctt ctctttagac gacctcttcc aaaagatcaa caaaaatgaa gtttatctgg 360
ggatcgtcaa atctttttca aatttaatgt atatgtgtat ataaggtagt attcagtgaa 420
tacttgagaa atgtacaaat ctttcatcca tacctgtgca tgagctgtat tcttcacagc 480
aacagagctc agttaaatgc aactgcaagt aggttactgt aagatgttta agataaaagt 540
tcttccagtc agtttttctc ttaagtgcct gtttgagttt actgaaacag tttacttttg 600
ttcaataaag tttgtatgtt gcatttaaaa aaaaaaaaaa aaagtcga 648

<210> 121
<211> 1842
<212> DNA
<213> Homo sapiens

<400> 121
ctcgagccgc tcgagccgct gctctctgga gggggtagag atcaaaggcg gctccttccg 60
acttctccaa gagggccagg cactggagta cgtgtgtcct tctggcttct acccgtaccc 120
tgtgcagaca cgtacctgca gatctacggg gtcctggagc accctgaaga ctcaagacca 180
aaagactgtc aggaaggcag agtgcagagc aatccactgt ccaagaccac acgacttcga 240
gaacggggaa tactggcccc ggtctcccta ctacaatgtg agtgatgaga tctctttcca 300
ctgctatgac ggttacactc tccggggctc tgccaatcgc acctgccaag tgaatggccg 360
gtggagtggg cagacagcga tctgtgacaa cggagcgggg tactgctcca acccgggcat 420
ccccattggc acaaggaagg tgggcagcca gtaccgcctt gaagacagcg tcacctacca 480
ctgcagccgg gggcttaccc tgcgtggctc ccagcggcga acgtgtcagg aaggtggctc 540
ttggagcggg acggagcctt cctgccaaga ctccttcatg tacgacaccc ctcaagaggt 600
ggccgaagct ttcctgtctt ccctgacaga gaccatagaa ggagtcgatg ctgaggatgg 660
gcacggccca ggggaacaac agaagcggaa gatcgtcctg gacccttcag gctccatgaa 720
catctacctg gtgctagatg gatcagacag cattggggcc agcaacttca caggagccaa 780
aaagtgtcta gtcaacttaa ttgagaaggt ggcaagttat ggtgtgaagc caagatatgg 840
tctagtgaca tatgccacat accccaaaat ttgggtcaaa gtgtctgaag cagacagcag 900
taatgcagac tgggtcacga agcagctcaa tgaaatcaat tatgaagacc acaagttgaa 960
gtcagggact aacaccaaga aggccctcca ggcagtgtac agcatgatga gctggccaga 1020
tgacgtccct cctgaaggct ggaaccgcac ccgccatgtc atcatcctca tgactgatgg 1080
attgcacaac atgggcgggg acccaattac tgtcattgat gagatccggg acttgctata 1140
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cgggcctttg gtgaaccaag tgaacatcaa tgctttggct tccaagaaag acaatgagca 1260
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ccacaagcaa ccatggcagg ccaagatctc agtcattcgc ccttcaaagg gacacgagag 1440
ctgtatgggg gctgtggtgt ctgagtactt tgtgctgaca gcagcacatt gtttcactgt 1500
ggatgacaag gaacactcaa tcaaggtcag cgtaggaggg gagaagcggg acctggagat 1560
agaagtagtc ctatttcacc ccaactacaa cattaatggg aaaaaagaag caggaattcc 1620
tgaattttat gactatgacg ttgccctgat caagctcaag aataagctga aatatggcca 1680
gactatcagg cccatttgtc tcccctgcac cgagggaaca actcgagctt tgaggcttcc 1740
tccaactacc acttgccagc aacaaaagga agagctgctc cccgcagaag agcaaagaaa 1800
gctgtgtttg tccgggggga gaaaaaaacc gccccggggg gg 1842

<210> 122
<211> 1596
<212> DNA
<213> Homo sapiens

<400> 122
ggcgggtata aaagccccac ccaggccagc cggctctgct cagcatttgg ggacgctctc 60
agctctcggc gcacggccca gcttccttca aaatgtctac tgttcacgaa atcctgtgca 120
agctcagctt ggagggtgat cactctacac ccccaagtgc atatgggtct gtcaaagcct 180
atactaactt tgatgctgag cgggatgctt tgaacattga aacagccatc aagaccaaag 240

gtgtggatga ggtcaccatt gtcaacattt tgaccaaccg cagcaatgca cagagacagg 300
atattgcctt cgcctaccag agaaggacca aaaaggaact tgcatcagca ctgaagtcag 360
ccttatctgg ccacctggag acggtgattt tgggcctatt gaagacacct gctcagtatg 420
acgcttctga gctaaaagct tccatgaagg ggctgggaac cgacgaggac tctctcattg 480
agatcatctg ctccagaacc aaccaggagc tgcaggaaat taacagagtc tacaaggaaa 540
tgtacaagac tgatctggag aaggacatta tttcggacac atctggtgac ttccgcaagc 600
tgatggttgc cctggcaaag ggtagaagag cagaggatgg ctctgtcatt gattatgaac 660
tgattgacca agatgctcgg gatctctatg acgctggagt gaagaggaaa ggaactgatg 720
ttcccaagtg gatcagcatc atgaccgagc ggaggggccc cacctccaga aagtatttga 780
taggtacaag agttacagcc cttatgacat gttggaaagc atcaggaaag aggttaaagg 840
agacctggaa aatgctttcc tgaacctggt tcagtgcatt cagaacaagc ccctgtattt 900
tgctgatcgg ctgtatgact ccatgaaggg caaggggacg cgagataagg tcctgatcag 960
aatcatggtc tcccgcagtg aagtggacat gttgaaaatt aggtctgaat tcaagagaaa 1020
gtacggcaag tccctgtact attatatcca gcaagacact aagggcgact accagaaagc 1080
gctgctgtac ctgtgtggtg gagatgactg aagcccgaca cggcctgagc gtccagaaat 1140
ggtgctcacc atgcttccag ctaacaggtc tagaaaacca gcttgcgaat aacagtcccc 1200
gtggccatcc ctgtgagggt gacgttagca ttacccccaa cctcatttta gttgcctaag 1260
cattgcctgg ccttcctgtc tagtctctcc tgtaagccaa agaaatgaac attccaagga 1320
gttggaagtg aagtctatga tgtgaaacac tttgcctcct gtgtactgtg tcataaacag 1380
atgaataaac tgaatttgta ctttagaaac acgtactttg tggccctgct ttcaactgaa 1440
ttgtttgaaa attaaacgtg cttggggttc agctggtgag gctgtccctg taggaagaaa 1500
gctctgggac tgagctgtac agtatggttg cccctatcca agtgtcgcta tttaagttaa 1560
atttaaatga aataaaataa aataaaatca aaaaaa 1596

<210> 123
<211> 1033
<212> DNA
<213> Homo sapiens

<400> 123
gtcgcagctg accctcgctc ccgcccccgc ctggagtccg acgtggaagt tgctggctga 60
ctgggcttgc gaggaaaccg cctcggagct gcagccgaag gcaaggaatc actgaagatc 120
ggcgagggag gacagggggt tcatcatggg tggctttttc tcaagtatat tttccagtct 180
gtttggaact cgggaaatga gaatttttaat tttgggatta gatggagcag gaaaaaccac 240
aattttgtac agattacaag tgggagaagt tgttactact atacctacca ttggatttaa 300
tgtagagacg gtgacgtaca aaaaccttaa attccaagtc tgggatttag gaggacagac 360
aagtatcagg ccatactgga gatgttacta ttcaaacaca gatgcagtca tttatgtagt 420
agacagttgt gaccgagacc gaattggcat ttccaaatca gagttagttg ccatgttgga 480
ggaagaagag ctgagaaaag ccattttagt ggtgtttgca aataaacagg acatggaaca 540
ggccatgact tcctcagaga tggcaaattc acttgggtta cctgccttga aggaccgaaa 600
atggcagata ttcaaaacgt cagcaaccaa aggcaccggc cttgatgagg caatggaatg 660
gttagttgaa acattaaaaa gcagacagta attcagtcca ttcttctccc ctgaaatgaa 720
gactacatca cctctctccc tttggaaaca gtcaagtgta cttcacacta ctagatgtta 780
aaactatatg attattggca tatactgact gactgcaata tttgtagtaa atagggaaaa 840
taagtattta gttggaggga taatttgatc gaatcacctg aatgttctat gtaatgtaaa 900
atattctttt cttgctttct tgtgttaagg tatatattct atttgtatgg aattcttatt 960
caaatacagt tctattaaag agtatactcc tattggatga aaaaaaccta aaaaaaaaaa 1020
aaaaaaaaaa aaa 1033

<210> 124
<211> 65
<212> PRT
<213> Homo sapiens

<400> 124
Ile Cys Leu Leu Val His Phe Val Ser Arg Ala Lys Thr Val Asn Leu

1 5 10 15

Thr Phe Ser Tyr Trp Trp Val Ile Thr Glu Asn Lys Asp Leu Phe Ser
20 25 30

Cys Ser Leu Leu Lys Ser His Lys Asn Asn Gln Ile Gly Ser Cys Leu
35 40 45

Leu Ser Cys Val Ser Trp Phe Leu Thr Cys Val His Thr Pro Val Cys
50 55 60

Leu
65

<210> 125
<211> 64
<212> PRT
<213> Homo sapiens

<400> 125
Ile Ser Val Phe Arg Leu Phe Lys Tyr Leu Thr His Phe Gln Thr Cys
1 5 10 15

Thr Met Phe Tyr Lys Pro Leu Asp Phe Gln Gln His Thr Ile Glu Asn
20 25 30

Thr Cys Tyr Ser Lys His Asn Phe Ser Val Ser Ser Ile Ala Val Val
35 40 45

Arg Asp Asn Ile Ala Ile Ser Gly Met Leu Gln Ala Phe Lys Ile Ala
50 55 60

<210> 126
<211> 61
<212> PRT
<213> Homo sapiens

<400> 126
Lys Ala Asn Leu Leu Pro Ala Thr Pro Glu Gly Thr Gln Ile Trp Val
1 5 10 15

Gly Pro Val Phe Gln Leu Gly Lys Arg Met Gly Lys Pro Gly Asp Gly
20 25 30

Phe His Lys Phe Ser Ser Gly Leu Trp His Ser Phe Gln Glu Ile Pro
35 40 45

Leu Gly Lys Gly Leu Leu Ala Asn Met His Phe Gln Thr
50 55 60

<210> 127
<211> 82
<212> PRT
<213> Homo sapiens

<400> 127
Leu Lys Asn Thr Asn Glu Val Lys Ala Leu Asn Trp Tyr Thr Leu Phe
1 5 10 15

Thr Pro Ile Phe Gln Val Trp Lys Cys Ile Phe Ala Ser Arg Pro Leu
20 25 30

Pro Arg Gly Ile Ser Trp Lys Glu Cys His Asn Pro Leu Glu Asn Leu
35 40 45

Trp Lys Pro Ser Pro Gly Phe Pro Ile Arg Leu Pro Ser Trp Lys Thr
50 55 60

Gly Pro Thr His Ile Trp Val Pro Ser Gly Val Ala Gly Arg Arg Phe
65 70 75 80

Ala Phe

<210> 128
<211> 90
<212> PRT
<213> Homo sapiens

<400> 128
His Thr Trp Asp Pro Tyr Pro Leu Gly Ile Ser Pro Arg Thr Ile Arg
1 5 10 15

Pro Val Cys Gln Pro Lys Val Ala Phe Gly Met Leu Asn Phe Pro Leu
20 25 30

Ser Lys Lys Val His Leu Pro Asn Glu Val Thr Ile Arg Leu Asn Pro
35 40 45

Lys Lys Ser Leu Asp Phe Val Phe Tyr Lys Asn Ser Thr Phe Pro Ile
50 55 60

Lys Ser Leu Val Ile Lys Ile Ser Thr Leu Pro Lys Cys Asp Ser Thr
65 70 75 80

Ala Trp Phe Leu Ala Asn Lys Asn Pro Ile
85 90

<210> 129
<211> 82
<212> PRT
<213> Homo sapiens

<400> 129
Met Val Ala Asp Tyr Gly Cys Thr Ile Leu Ile Leu Gly Pro Phe Thr
1 5 10 15

His Arg Asn His Thr Lys Trp Pro Asp Thr Tyr Phe Thr Glu Gln Phe
20 25 30

Lys Tyr Tyr Thr Leu Ala Lys Ser Thr Tyr Ser Thr His Pro Gly Glu
35 40 45

Gly Gly Glu Lys Thr His Thr Tyr Lys Thr Thr Ser Leu Asp Thr Met
50 55 60

Cys Leu Pro Thr Ile Ser Ser Leu Asn Asn Phe His Gln Leu Arg Cys
65 70 75 80

Leu Val

<210> 130
<211> 70
<212> PRT
<213> Homo sapiens

<400> 130
Arg Asn Leu Val Thr Gln Met Lys Ser Gly Ile Glu Asp Pro Trp Thr
1 5 10 15

Trp Gln Val Asn Ala Asp Tyr Ser Leu Ala Phe Pro Leu Tyr Leu Cys
20 25 30

Lys Glu Gly Tyr Thr Glu Leu Ile Leu Phe Gln Ala Tyr Asn Phe Lys
35 40 45

Phe Tyr His Leu Asn Ser Ser Thr Phe Ala Ala Glu Glu Trp Asn Gln
50 55 60

Lys Asn Val Val Ser Trp
65 70

<210> 131
<211> 60
<212> PRT
<213> Homo sapiens

<400> 131
Ala Ile Gln Cys Glu Ala Tyr Phe Ile Ala Thr Leu Val Asp Cys Gln
1 5 10 15

Gly Asp Ser Ala Thr Val Leu Asp Lys Leu Met Phe Pro Phe Ser Leu
20 25 30

Ala Ala Asn Arg Arg Ala Thr Tyr Ser Ala Gly Ser Arg Ala Arg Ser
35 40 45

Trp Gly Ser Arg Gly Tyr Thr Ser Ser Leu Ile Ile
50 55 60

<210> 132
<211> 181
<212> PRT
<213> Homo sapiens

<400> 132
Ile Pro Asn Met Ala Ala Pro Leu Gly Gly Met Phe Ser Gly Gln Pro

```
  1               5                  10                  15

Pro Gly Pro Pro Gln Ala Pro Pro Gly Leu Pro Gly Gln Ala Ser Leu
            20                  25                  30

Leu Gln Ala Ala Pro Gly Ala Pro Arg Pro Ser Ser Ser Thr Leu Val
        35                  40                  45

Asp Glu Leu Glu Ser Ser Phe Glu Ala Cys Phe Ala Ser Leu Val Ser
    50                  55                  60

Gln Asp Tyr Val Asn Gly Thr Asp Gln Glu Glu Ile Arg Thr Gly Val
65                  70                  75                  80

Asp Gln Cys Ile Gln Lys Phe Leu Asp Ile Ala Arg Gln Thr Glu Cys
                85                  90                  95

Phe Phe Leu Gln Lys Arg Leu Gln Leu Ser Val Gln Lys Pro Glu Gln
            100                 105                 110

Val Ile Lys Glu Asp Val Ser Glu Leu Arg Asn Glu Leu Gln Arg Lys
        115                 120                 125

Asp Ala Leu Val Gln Lys His Leu Thr Lys Leu Arg His Trp Gln Gln
    130                 135                 140

Val Leu Glu Asp Ile Asn Val Gln His Lys Lys Pro Ala Asp Ile Pro
145                 150                 155                 160

Gln Gly Ser Leu Ala Tyr Leu Glu Gln Ala Ser Ala Asn Ile Pro Ala
                165                 170                 175

Pro Leu Lys Pro Thr
            180
```

<210> 133
<211> 423
<212> PRT
<213> Homo sapiens

<400> 133

```
Leu Ser Glu Asp Glu Ile Arg Thr Leu Lys Gln Lys Lys Ile Asp Glu
  1               5                  10                  15

Thr Ser Glu Gln Glu Gln Lys His Lys Glu Thr Asn Asn Ser Asn Ala
            20                  25                  30

Gln Asn Pro Ser Glu Glu Glu Gly Glu Gly Gln Asp Glu Asp Ile Leu
        35                  40                  45

Pro Leu Thr Leu Glu Glu Lys Glu Asn Lys Glu Tyr Leu Lys Ser Leu
    50                  55                  60

Phe Glu Ile Leu Ile Leu Met Gly Lys Gln Asn Ile Pro Leu Asp Gly
65                  70                  75                  80

His Glu Ala Asp Glu Ile Pro Glu Gly Leu Phe Thr Pro Asp Asn Phe
```

```
                85                  90                  95

Gln Ala Leu Leu Glu Cys Arg Ile Asn Ser Gly Glu Glu Val Leu Arg
            100                 105                 110

Lys Arg Phe Glu Thr Thr Ala Val Asn Thr Leu Phe Cys Ser Lys Thr
        115                 120                 125

Gln Gln Arg Gln Met Leu Glu Ile Cys Glu Ser Cys Ile Arg Glu Glu
    130                 135                 140

Thr Leu Arg Glu Val Arg Asp Ser His Phe Phe Ser Ile Ile Thr Asp
145                 150                 155                 160

Asp Val Val Asp Ile Ala Gly Glu Glu His Leu Pro Val Leu Val Arg
                165                 170                 175

Phe Val Asp Glu Ser His Asn Leu Arg Glu Glu Phe Ile Gly Phe Leu
            180                 185                 190

Pro Tyr Glu Ala Asp Ala Glu Ile Leu Ala Val Lys Phe His Thr Met
        195                 200                 205

Ile Thr Glu Lys Trp Gly Leu Asn Met Glu Tyr Cys Arg Gly Gln Ala
    210                 215                 220

Tyr Ile Val Ser Ser Gly Phe Ser Ser Lys Met Lys Val Val Ala Ser
225                 230                 235                 240

Arg Leu Leu Glu Lys Tyr Pro Gln Ala Ile Tyr Thr Leu Cys Ser Ser
                245                 250                 255

Cys Ala Leu Asn Met Trp Leu Ala Lys Ser Val Pro Val Met Gly Val
            260                 265                 270

Ser Val Ala Leu Gly Thr Ile Glu Glu Val Cys Ser Phe Phe His Arg
        275                 280                 285

Ser Pro Gln Leu Leu Leu Glu Leu Asp Asn Val Ile Ala Val Leu Phe
    290                 295                 300

Gln Asn Ser Lys Glu Arg Gly Lys Glu Leu Lys Glu Ile Cys His Ser
305                 310                 315                 320

Gln Trp Thr Gly Arg His Asp Ala Phe Glu Ile Leu Val Glu Leu Leu
                325                 330                 335

Gln Ala Leu Val Leu Cys Leu Asp Gly Ile Asn Ser Asp Thr Asn Ile
            340                 345                 350

Arg Trp Asn Asn Tyr Ile Ala Gly Arg Ala Phe Val Leu Cys Ser Ala
        355                 360                 365

Val Ser Asp Phe Asp Phe Ile Val Thr Ile Val Val Leu Lys Asn Val
    370                 375                 380

Leu Ser Phe Thr Arg Ala Phe Gly Lys Asn Leu Gln Gly Gln Thr Ser
385                 390                 395                 400
```

```
Asp Val Phe Phe Ala Ala Gly Ser Leu Thr Ala Val Leu His Ser Leu
                405                 410                 415

Asn Glu Val Ser Gly Lys Tyr
            420
```

<210> 134
<211> 237
<212> PRT
<213> Homo sapiens

<400> 134

```
Val Glu Asn Ile Glu Val Tyr His Glu Phe Trp Phe Glu Glu Ala Thr
  1               5                  10                  15

Asn Leu Ala Thr Lys Leu Asp Ile Gln Met Lys Leu Pro Gly Lys Phe
            20                  25                  30

Arg Arg Ala His Gln Gly Asn Leu Glu Ser Gln Leu Thr Ser Glu Ser
        35                  40                  45

Tyr Tyr Lys Glu Thr Leu Ser Val Pro Thr Val Glu His Ile Ile Gln
    50                  55                  60

Glu Leu Lys Asp Ile Phe Ser Glu Gln His Leu Lys Ala Leu Lys Cys
65                  70                  75                  80

Leu Ser Leu Val Pro Ser Val Met Gly Gln Leu Lys Phe Asn Thr Ser
                85                  90                  95

Glu Glu His His Ala Asp Met Tyr Arg Ser Asp Leu Pro Asn Pro Asp
            100                 105                 110

Thr Leu Ser Ala Glu Leu His Cys Trp Arg Ile Lys Trp Lys His Arg
        115                 120                 125

Gly Lys Asp Ile Glu Leu Pro Ser Thr Ile Tyr Glu Ala Leu His Leu
    130                 135                 140

Pro Asp Ile Lys Phe Phe Pro Asn Val Tyr Ala Leu Leu Lys Val Leu
145                 150                 155                 160

Cys Ile Leu Pro Val Met Lys Val Glu Asn Glu Arg Tyr Glu Asn Gly
                165                 170                 175

Arg Lys Arg Leu Lys Ala Tyr Leu Arg Asn Thr Leu Thr Asp Gln Arg
            180                 185                 190

Ser Ser Asn Leu Ala Leu Leu Asn Ile Asn Phe Asp Ile Lys His Asp
        195                 200                 205

Leu Asp Leu Met Val Asp Thr Tyr Ile Lys Leu Tyr Thr Ser Lys Ser
    210                 215                 220

Glu Leu Pro Thr Asp Asn Ser Glu Thr Val Glu Asn Thr
225                 230                 235
```

<210> 135
<211> 89
<212> PRT
<213> Homo sapiens

<400> 135
Arg Ile Arg Ile Asn Gly Ser Leu Cys Pro Gln Thr Lys Asn Asn Leu
1 5 10 15

Tyr Phe His Ile Val Glu Leu Ser Ile Ser Gly Ala Ser Val Gly Glu
20 25 30

Arg Trp Tyr Gly Met Gly Glu Ser Ile Leu Pro Ala Arg Gly Glu Ser
35 40 45

Gln Gly Leu Leu Cys Leu Tyr Phe Tyr Lys Glu Ile Leu Pro Leu Phe
50 55 60

Leu Val Asn Lys Leu Arg Gly Thr Asp Val Gly Leu Glu Gln Gly Leu
65 70 75 80

Ser Gly Gly Glu Gly Ser Trp Thr Ala
85

<210> 136
<211> 82
<212> PRT
<213> Homo sapiens

<400> 136
Glu Glu Glu Arg Ala Lys Arg Glu Glu Leu Glu Arg Ile Leu Glu Glu
1 5 10 15

Asn Asn Arg Lys Ile Ala Glu Ala Gln Ala Lys Leu Ala Glu Glu Gln
20 25 30

Leu Arg Ile Val Glu Glu Gln Arg Lys Ile His Glu Glu Arg Met Lys
35 40 45

Leu Glu Gln Glu Arg Gln Arg Gln Gln Lys Glu Glu Gln Lys Ile Ile
50 55 60

Leu Gly Lys Gly Lys Ser Arg Pro Lys Leu Ser Phe Ser Leu Lys Thr
65 70 75 80

Gln Asp

<210> 137
<211> 71
<212> PRT
<213> Homo sapiens

<400> 137
Ser Ala Leu Lys Val Glu Tyr Leu Leu Ser Cys Pro Val Ser Cys Arg

```
  1               5                  10                  15

Val Cys Ser Ser Ala Ala Ile Arg Ala Ser Phe Leu Phe Lys Met Ile
             20                  25                  30

Cys Thr Val Ser Leu Ala Ile Pro Ala Ser Ala Ala Gln Pro Phe Ile
         35                  40                  45

Lys Lys Gln His Thr Arg Lys Ala Glu Leu Arg Asn Ala Asp Val Tyr
     50                  55                  60

Gly Lys Lys Glu Gln Lys Met
 65                  70
```

<210> 138
<211> 67
<212> PRT
<213> Homo sapiens

<400> 138

```
Ser Ser Ala Gln Arg Lys Tyr Phe Asn Leu Pro Val Glu Ile Leu Val
  1               5                  10                  15

Met Glu Arg Cys Gln Thr Val Leu Asn Gly Arg Thr Ser Lys Ser Glu
             20                  25                  30

Ala Thr Val Pro Thr Thr Arg Gly Leu Leu Tyr Cys Ser Thr Phe Ser
         35                  40                  45

Ala Leu Tyr Phe Leu Ala Glu Ala Ser Pro Trp Ser Ala Met Tyr Lys
     50                  55                  60

Leu Gly Tyr
 65
```

<210> 139
<211> 49
<212> PRT
<213> Homo sapiens

<400> 139

```
Arg Ala Glu Lys Val Glu Gln Tyr Lys Ser Pro Arg Val Val Gly Thr
  1               5                  10                  15

Val Ala Ser Leu Leu Leu Val Leu Pro Phe Lys Thr Val Trp His Leu
             20                  25                  30

Ser Met Thr Arg Ile Ser Thr Gly Arg Leu Lys Tyr Phe Leu Cys Ala
         35                  40                  45

Glu
```

<210> 140
<211> 132
<212> PRT

<213> Homo sapiens

<400> 140

```
Ser Cys Glu Arg Arg Gly Phe Ile Met Ala Asp Asp Leu Lys Arg Phe
  1               5                  10                  15

Leu Tyr Lys Lys Leu Pro Ser Val Glu Gly Leu His Ala Ile Val Val
             20                  25                  30

Ser Asp Arg Asp Gly Val Pro Val Ile Lys Val Ala Asn Asp Asn Ala
         35                  40                  45

Pro Glu His Ala Leu Arg Pro Gly Phe Leu Ser Thr Phe Ala Leu Ala
     50                  55                  60

Thr Asp Gln Gly Ser Lys Leu Gly Leu Ser Lys Asn Lys Ser Ile Ile
 65                  70                  75                  80

Cys Tyr Tyr Asn Thr Tyr Gln Val Val Gln Phe Asn Arg Leu Pro Leu
                 85                  90                  95

Val Val Ser Phe Ile Ala Ser Ser Ser Ala Asn Thr Gly Leu Ile Val
            100                 105                 110

Ser Leu Glu Lys Glu Leu Ala Pro Leu Phe Glu Glu Leu Arg Gln Val
        115                 120                 125

Val Glu Val Ser
    130
```

<210> 141
<211> 126
<212> PRT
<213> Homo sapiens

<400> 141

```
Gln Met Ile Leu Leu Phe Leu Glu Ser Pro Ser Leu Leu Pro Trp Ser
  1               5                  10                  15

Val Ala Arg Ala Lys Val Asp Lys Lys Pro Gly Arg Lys Ala Cys Ser
             20                  25                  30

Gly Ala Leu Ser Phe Ala Thr Leu Ile Thr Gly Thr Pro Ser Leu Ser
         35                  40                  45

Asp Thr Thr Met Ala Trp Ser Pro Ser Thr Leu Gly Asn Phe Leu Tyr
     50                  55                  60

Lys Asn Arg Phe Arg Ser Ser Ala Met Met Asn Pro Leu Leu Ser Gln
 65                  70                  75                  80

Asp Gln Ser Pro Arg Leu Gly Phe Leu Gly Cys Leu Val Leu Ser Ala
                 85                  90                  95

Val Thr Ser Gly Thr Ala Leu Lys Thr Gly Ser Ser Ser Ser His Arg
            100                 105                 110
```

```
His Met Ile His Asp Leu Val Cys Ala Pro Gly Ser Thr Phe
        115                 120                 125


<210> 142
<211> 152
<212> PRT
<213> Homo sapiens

<400> 142
Ser Ala Val Lys Arg Gly Trp Asp Leu Asn Met Ala Ala Val Val Ala
  1               5                  10                  15

Ala Thr Ala Leu Lys Gly Arg Gly Ala Arg Asn Ala Arg Val Leu Arg
             20                  25                  30

Gly Ile Leu Ala Gly Ala Thr Ala Asn Lys Ala Ser His Asn Arg Thr
         35                  40                  45

Arg Ala Leu Gln Ser His Ser Ser Pro Glu Gly Lys Glu Glu Pro Glu
     50                  55                  60

Pro Leu Ser Pro Glu Leu Glu Tyr Ile Pro Arg Lys Arg Gly Lys Asn
 65                  70                  75                  80

Pro Met Lys Ala Val Gly Leu Ala Trp Ala Ile Gly Phe Pro Cys Gly
                85                  90                  95

Ile Leu Leu Phe Ile Leu Thr Lys Arg Glu Val Asp Lys Asp Arg Val
            100                 105                 110

Lys Gln Met Lys Ala Arg Gln Asn Met Arg Leu Ser Asn Thr Gly Glu
        115                 120                 125

Tyr Glu Ser Gln Arg Phe Arg Ala Ser Ser Gln Ser Ala Pro Ser Pro
    130                 135                 140

Asp Val Gly Ser Gly Val Gln Thr
145                 150


<210> 143
<211> 114
<212> PRT
<213> Homo sapiens

<400> 143
Glu Gly Arg Ser Ala Pro Gln Val Cys Thr Pro Asp Pro Thr Ser Gly
  1               5                  10                  15

Asp Gly Ala Leu Trp Glu Glu Ala Leu Asn Leu Trp Leu Ser Tyr Ser
             20                  25                  30

Pro Val Leu Asp Asn Arg Met Phe Cys Arg Ala Phe Ile Cys Phe Thr
         35                  40                  45

Arg Ser Leu Ser Thr Ser Arg Leu Val Arg Met Lys Arg Arg Ile Pro
     50                  55                  60
```

```
Gln Gly Lys Pro Met Ala Gln Ala Ser Pro Thr Ala Phe Met Gly Phe
 65                  70                  75                  80

Leu Pro Leu Phe Leu Gly Met Tyr Ser Ser Ser Gly Asp Arg Gly Ser
                85                  90                  95

Gly Ser Ser Leu Pro Ser Gly Glu Leu Trp Leu Cys Arg Ala Arg Val
            100                 105                 110

Leu Leu
```

<210> 144
<211> 267
<212> PRT
<213> Homo sapiens

<400> 144

```
Glu Asp Glu Val Glu Glu Glu Ser Thr Ala Leu Gln Lys Thr Asp Lys
  1               5                  10                  15

Lys Glu Ile Leu Lys Lys Ser Glu Lys Asp Thr Asn Ser Lys Val Lys
            20                  25                  30

Pro Lys Gly Lys Val Arg Trp Thr Gly Ser Arg Thr Arg Gly Arg Trp
        35                  40                  45

Lys Tyr Ser Ser Asn Asp Glu Ser Glu Gly Ser Gly Ser Glu Lys Ser
    50                  55                  60

Ser Ala Ala Ser Glu Glu Glu Glu Glu Lys Glu Ser Glu Glu Ala Ile
65                  70                  75                  80

Leu Ala Asp Asp Asp Glu Pro Cys Lys Lys Cys Gly Leu Pro Asn His
                85                  90                  95

Pro Glu Leu Ile Leu Leu Cys Asp Ser Cys Asp Ser Gly Tyr His Thr
            100                 105                 110

Ala Cys Leu Arg Pro Pro Leu Met Ile Ile Pro Asp Gly Glu Trp Phe
        115                 120                 125

Cys Pro Pro Cys Gln His Lys Leu Leu Cys Glu Lys Leu Glu Glu Gln
    130                 135                 140

Leu Gln Asp Leu Asp Val Ala Leu Lys Lys Lys Glu Arg Ala Glu Arg
145                 150                 155                 160

Arg Lys Glu Arg Leu Val Tyr Val Gly Ile Ser Ile Glu Asn Ile Ile
                165                 170                 175

Pro Pro Gln Glu Pro Asp Phe Ser Glu Asp Gln Glu Glu Lys Lys Lys
            180                 185                 190

Asp Ser Lys Lys Ser Lys Ala Asn Leu Leu Glu Arg Arg Ser Thr Arg
        195                 200                 205
```

```
Thr Arg Lys Cys Ile Ser Tyr Arg Phe Asp Glu Phe Asp Glu Ala Ile
    210                 215                 220

Asp Glu Ala Ile Glu Asp Asp Ile Lys Glu Ala Asp Gly Gly Gly Val
225                 230                 235                 240

Gly Arg Gly Lys Asp Ile Ser Thr Ile Thr Gly His Arg Gly Lys Asp
                245                 250                 255

Ile Ser Thr Ile Leu Asp Glu Lys Ile Ile Thr
            260                 265
```

<210> 145
<211> 185
<212> PRT
<213> Homo sapiens

<400> 145

```
Ser Ser Glu Lys Ser Gly Ser Cys Gly Gly Met Met Phe Ser Ile Leu
  1               5                  10                  15

Ile Pro Thr Tyr Thr Lys Arg Ser Phe Leu Arg Ser Ala Arg Ser Phe
            20                  25                  30

Phe Phe Lys Ala Thr Ser Lys Ser Cys Asn Cys Ser Ser Asn Phe Ser
        35                  40                  45

Gln Ser Ser Leu Cys Trp Gln Gly Gly Gln Asn His Ser Pro Ser Gly
    50                  55                  60

Met Ile Ile Arg Gly Gly Arg Arg Gln Ala Val Trp Tyr Pro Leu Ser
65                  70                  75                  80

Gln Glu Ser His Arg Arg Ile Ser Ser Gly Trp Phe Gly Arg Pro His
                85                  90                  95

Phe Leu His Gly Ser Ser Ser Ser Ala Arg Met Ala Ser Ser Leu Ser
            100                 105                 110

Phe Ser Ser Ser Ser Ser Glu Ala Ala Asp Asp Phe Ser Leu Pro Asp
        115                 120                 125

Pro Ser Leu Ser Ser Leu Leu Glu Tyr Phe His Leu Pro Arg Val Arg
    130                 135                 140

Glu Pro Val His Arg Thr Leu Pro Leu Gly Phe Thr Leu Glu Phe Val
145                 150                 155                 160

Ser Phe Ser Asp Phe Phe Lys Ile Ser Phe Leu Ser Val Phe Cys Lys
                165                 170                 175

Ala Val Asp Ser Ser Ser Thr Ser Ser
            180                 185
```

<210> 146

<400> 146
000

<210> 147

<400> 147
000

<210> 148
<211> 134
<212> PRT
<213> Homo sapiens

<400> 148
Lys Arg Gln Pro Thr Ser Ala Met Lys Asp Pro Ser Arg Ser Ser Thr
1 5 10 15

Ser Pro Ser Ile Ile Asn Glu Asp Val Ile Ile Asn Gly His Ser His
20 25 30

Glu Asp Asp Asn Pro Phe Ala Glu Tyr Met Trp Met Glu Asn Glu Glu
35 40 45

Glu Phe Asn Arg Gln Ile Glu Glu Glu Leu Trp Glu Glu Glu Phe Ile
50 55 60

Glu Arg Cys Phe Gln Glu Met Leu Glu Glu Glu Glu Glu His Glu Trp
65 70 75 80

Phe Ile Pro Ala Arg Asp Leu Pro Gln Thr Met Asp Gln Ile Gln Asp
85 90 95

Gln Phe Asn Asp Leu Val Ile Ser Asp Gly Ser Ser Leu Glu Asp Leu
100 105 110

Val Val Lys Ser Asn Leu Asn Pro Asn Ala Lys Glu Phe Val Pro Gly
115 120 125

Val Lys Tyr Gly Asn Ile
130

<210> 149
<211> 135
<212> PRT
<213> Homo sapiens

<400> 149
His Ser Asp Lys Arg Ala Phe Thr Ile Lys Ser Ser Asn Thr Ala Phe
1 5 10 15

Thr Val Trp Lys Leu Cys Tyr Ile His Gln Lys Arg Ala Pro Ser Thr
20 25 30

Gln Ile Phe Pro Tyr Phe Thr Pro Gly Thr Asn Ser Phe Ala Phe Gly
35 40 45

```
Phe Arg Leu Leu Leu Thr Thr Arg Ser Ser Arg Glu Glu Pro Ser Leu
 50                  55                  60

Ile Thr Arg Ser Leu Asn Trp Ser Trp Ile Trp Ser Ile Val Cys Gly
65                  70                  75                  80

Arg Ser Arg Ala Gly Ile Asn His Ser Cys Ser Ser Ser Ser Ser Ser
                85                  90                  95

Ile Ser Trp Lys Gln Arg Ser Ile Asn Ser Ser Ser His Asn Ser Ser
            100                 105                 110

Ser Ile Cys Leu Leu Asn Ser Ser Ser Phe Ser Ile His Met Tyr Ser
        115                 120                 125

Ala Asn Gly Leu Ser Ser Ser
    130                 135


<210> 150
<211> 58
<212> PRT
<213> Homo sapiens

<400> 150
Leu Val Ser Gly Ala Asn Gln Cys Gly Ser Cys Asn Ser Lys Ser Phe
  1               5                  10                  15

Leu Thr Lys Ala Trp Tyr Tyr Arg Val Gly Phe Arg Phe Phe Arg Gly
            20                  25                  30

Gly Leu Phe Asp Phe Asp Phe Phe Phe Phe Tyr Val Ile Phe Gly Lys
        35                  40                  45

Thr His Ser Glu Leu Tyr Leu Val Ser Thr
 50                  55


<210> 151
<211> 61
<212> PRT
<213> Homo sapiens

<400> 151
Phe Phe Val Leu Lys Ser Leu Leu Val Gly Ala Cys Tyr Trp Glu Gln
  1               5                  10                  15

Val Phe Val Gln Lys Leu Gln Ser Glu Ser Leu Cys Ile Thr Glu Thr
            20                  25                  30

Leu Phe Ile Thr Ser Leu Leu Ser Leu Pro Gln Lys Thr Val Gly Leu
        35                  40                  45

Asn Lys Ile Ile Cys Ile Leu Ile Tyr Leu Lys Cys Leu
 50                  55                  60
```

<210> 152
<211> 60
<212> PRT
<213> Homo sapiens

<400> 152
Ser Ala Cys Lys Phe Leu Arg Asp Leu Pro Leu Leu Thr Val Asp Gln
1 5 10 15

Leu Met Tyr Thr Cys Ile Ile Lys Ala Leu Asn Lys Ser Leu Trp Leu
20 25 30

Ile Thr Ala Lys Met Gly Thr Arg His Leu Leu Cys Val Leu Val Thr
35 40 45

Ala Val Ala Leu Arg Ala Val Arg Pro Cys Leu Ile
50 55 60

<210> 153
<211> 56
<212> PRT
<213> Homo sapiens

<400> 153
Lys Arg Asp Ile Ile Leu Asn Val Phe Ser Gln Arg Ser His Lys Arg
1 5 10 15

Lys Lys Asn Gln Asn Gln Ile Asn His His Glu Lys Asn Glu Thr Pro
20 25 30

His Gly Asn Thr Lys Leu Trp Leu Gly Ser Ser Tyr Tyr Tyr Ser Ser
35 40 45

His Ile Gly Trp Arg Arg Lys Pro
50 55

<210> 154

<400> 154
000

<210> 155
<211> 150
<212> PRT
<213> Homo sapiens

<400> 155
Ile Pro Val His Arg Leu His Gly Arg Ala Asp Pro Leu Gly Trp Ser
1 5 10 15

Ile Val Ser Asp Leu Ile Thr Ser Gly Leu Gly Ala Gly Val Leu Arg
20 25 30

Gly Leu Pro Ala Arg Arg Leu His Ser Leu Gly Arg Arg Val Leu Gly
35 40 45

```
Arg Pro Gly Val Trp Leu Glu Arg Leu Gly His Gly Arg Arg Asp Ala
     50                  55                  60

Leu Gly Ala Trp Ser Ala Ala Gln Arg Pro Arg Thr Pro Gly Arg Pro
 65                  70                  75                  80

Ala Cys Val Cys Ala Pro Arg Arg Gly Pro Glu Ser Pro Ser Ala Asp
                 85                  90                  95

Pro Val Pro Pro Pro Gly Arg Ala Gly Asp Pro Ser Pro Pro Asp Ala
            100                 105                 110

Ser Ala Ser Gly Pro Arg Gly Gly Ala Ala Thr Lys Ala Gly Pro Ala
        115                 120                 125

His Asp Pro Gly Gln Leu Arg Pro Glu Leu Arg Val Leu Pro Pro Pro
    130                 135                 140

Pro Arg Gly Asp Arg Glu
145                 150
```

<210> 156
<211> 81
<212> PRT
<213> Homo sapiens

<400> 156

```
Leu Pro Val Ala Ala Gly Gly Arg Gly Gln Asp Ala Gln Leu Arg Pro
  1               5                  10                  15

Glu Leu Ser Gly Val Val Ser Arg Pro Arg Leu Gly Gly Gly Ala Pro
             20                  25                  30

Ser Arg Ser Arg Gly Arg Arg Ile Gly Trp Ala Arg Val Ser Ser Pro
         35                  40                  45

Ala Gly Arg Arg Asp Arg Val Cys Gly Gly Gly Leu Gly Ala Ser Ala
     50                  55                  60

Gly Arg Ala His Ala Gly Gly Ala Ala Arg Gly Ala Gly Pro Leu Arg
 65                  70                  75                  80

Gly
```

<210> 157
<211> 214
<212> PRT
<213> Homo sapiens

<400> 157

```
Pro Gly Ser Gln Ser Val Thr Pro Pro Met Ala Glu Pro Leu Gln Pro
  1               5                  10                  15

Asp Pro Gly Ala Ala Glu Asp Ala Ala Ala Gln Ala Val Glu Thr Pro
             20                  25                  30
```

```
Gly Trp Lys Ala Pro Glu Asp Ala Gly Pro Gln Pro Gly Ser Tyr Glu
          35                  40                  45

Ile Arg His Tyr Gly Pro Ala Lys Trp Val Ser Thr Ser Val Glu Ser
      50                  55                  60

Met Asp Trp Asp Ser Ala Ile Gln Thr Gly Phe Thr Lys Leu Asn Ser
 65                  70                  75                  80

Tyr Ile Gln Gly Lys Asn Glu Lys Glu Met Lys Ile Lys Met Thr Ala
                 85                  90                  95

Pro Val Thr Ser Tyr Val Glu Pro Gly Ser Gly Pro Phe Ser Glu Ser
            100                 105                 110

Thr Ile Thr Ile Ser Leu Tyr Ile Pro Ser Glu Gln Gln Phe Asp Pro
        115                 120                 125

Pro Arg Pro Leu Glu Ser Asp Val Phe Ile Glu Asp Arg Ala Glu Met
    130                 135                 140

Thr Val Phe Val Arg Ser Phe Asp Gly Phe Ser Ser Ala Gln Lys Asn
145                 150                 155                 160

Gln Glu Gln Leu Leu Thr Leu Ala Ser Ile Leu Arg Glu Asp Gly Lys
                165                 170                 175

Val Phe Asp Glu Lys Val Tyr Tyr Thr Ala Gly Tyr Asn Ser Pro Val
            180                 185                 190

Lys Leu Leu Asn Arg Asn Asn Glu Val Trp Leu Ile Gln Lys Asn Glu
        195                 200                 205

Pro Thr Lys Glu Asn Glu
    210
```

<210> 158
<211> 62
<212> PRT
<213> Homo sapiens

<400> 158

```
Pro Asn Phe Tyr Arg Gly Phe Ile Phe Asn Leu Thr Met Cys Gly Gly
  1               5                  10                  15

Leu Ser Cys Leu Asn Leu Phe Arg Ala Val Cys Ser Val His Gln Met
            20                  25                  30

Gly Arg Ser Gly Met Gly His Leu Arg Pro Phe Arg Ser Gly Leu Asn
        35                  40                  45

Arg Met Leu Glu Pro Arg Leu Asp Ser Asp Thr Leu Arg Phe
    50                  55                  60
```

<210> 159

<211> 104
<212> PRT
<213> Homo sapiens

<400> 159
Ile His Leu Pro Lys Lys Leu Ile Ser Phe Tyr Leu Arg Gly Glu Val
1 5 10 15

Gln Phe Ser Phe Gly Ser Ser Glu Ser Lys His Leu Ile Cys Trp Val
20 25 30

Trp Lys Thr Pro Phe Leu Ala Phe Tyr Val Leu Ser His Asn Asn Ser
35 40 45

Ile Lys Gln Glu Gly Lys Gln Lys Thr Lys Lys Lys Lys Gly Lys Lys
50 55 60

Lys Asn Leu His Gly Leu Val Ser Leu Thr Lys His Val Gly Ala Val
65 70 75 80

Cys Leu Gly Gly Ala Gly Tyr Arg Thr Cys Gln Cys Leu Gly Phe Ser
85 90 95

Ile Asn Leu Ala Arg Asp Ile Lys
100

<210> 160
<211> 80
<212> PRT
<213> Homo sapiens

<400> 160
Ser Leu Leu Ile Ser Arg Lys Ile Lys Gln Asn Thr Ser Pro Ala Arg
1 5 10 15

Leu Thr Cys Val Tyr Ile Tyr Ile Lys Gln Arg Ala Thr Pro Thr Ser
20 25 30

Gln Gln Leu Gly Glu Ile Ser Ala Val His Ala Val Val Cys Gln Phe
35 40 45

Gly Glu Ile Thr Pro Trp Lys Asn Trp Lys Asn Leu Leu Ala Gly Lys
50 55 60

Asn Ser Phe Ile Cys Ile Lys Ser Val Leu Gln Lys Asn Pro Cys Gly
65 70 75 80

<210> 161

<400> 161
000

<210> 162

<400> 162

000

<210> 163
<211> 75
<212> PRT
<213> Homo sapiens

<400> 163
Pro Ser Ile Asp Leu Glu Ala Glu Glu Ser Gln Arg Leu Leu Lys Val
1 5 10 15

Val Met Trp Phe Ser Phe Lys Lys Leu Leu Phe Leu Glu Ser Arg Ile
20 25 30

Tyr Gly Tyr Asn Val Cys Ser Leu Phe Val His Lys Ile Lys Pro Phe
35 40 45

Lys Lys Leu Lys Lys Lys Lys Lys Arg Gly Glu Lys Lys Arg Glu Lys
50 55 60

Gly Lys Gly Lys Arg Lys Arg Arg Gly Glu Glu
65 70 75

<210> 164
<211> 68
<212> PRT
<213> Homo sapiens

<400> 164
Lys Tyr Leu Thr Leu Pro Tyr Lys Leu Leu Val Pro Phe Cys Ile Pro
1 5 10 15

Pro Ser Ile Thr Leu Thr Lys Gly Ile Phe Tyr Cys Lys Glu Tyr Phe
20 25 30

Ile Leu Tyr Ile Thr Ser His Glu Phe Leu Pro Leu Val Thr Ile Gln
35 40 45

Met Leu Pro Ser Ala Ile Ile Gln Ile Ala Gln Pro Phe Tyr Val His
50 55 60

Asn Ser Leu Leu
65

<210> 165
<211> 66
<212> PRT
<213> Homo sapiens

<400> 165
Leu Phe Phe Leu Phe Arg Tyr His Thr Val Pro Leu Pro Pro Lys Gly
1 5 10 15

Arg Val Leu Ile His Trp Met Thr Leu Cys Gln Thr Gln Met Lys Leu
20 25 30

Met Ala Ile Pro Leu Val Phe Gln Ile Met Phe Gly Ile Leu Asn Gly
35 40 45

Leu Tyr His Tyr Ala Val Phe Glu Glu Thr Leu Glu Lys Thr Ile His
50 55 60

Glu Glu
65

<210> 166
<211> 159
<212> PRT
<213> Homo sapiens

<400> 166
Thr Arg Leu Lys Gly Asp Arg Gly Gly Val His Phe Leu Lys Ala Leu
1 5 10 15

Arg Arg Gly Gly Leu Arg Ala Ser Leu Leu Tyr Leu Leu Glu Lys Tyr
20 25 30

Arg Leu Val Phe Leu Leu Ser Ile Cys Val Arg Gly Met Val Ser Ser
35 40 45

Val Lys Ser Phe Leu Val Gly Glu Gln Leu Leu Ser Ile Ser Glu Pro
50 55 60

Arg Phe Lys Met Ser Val Cys Lys Cys Ser Phe Leu Ser Thr Thr Ser
65 70 75 80

Thr Phe Val Pro Ile Ser Ser Asp Ser Lys Lys Val Ser Ser Tyr Phe
85 90 95

Ser Leu Cys Ser Glu Ser Leu Ala Glu Gln Asn Leu Phe Met Met Pro
100 105 110

Glu Val Phe Cys Ser Glu Gln Lys Phe Asp Pro Glu Leu Asn Asp Leu
115 120 125

Ser Phe Phe Phe Thr Arg Leu Phe Ser Ser Leu Val Thr Leu Arg Val
130 135 140

Ser Pro His Ala Pro Ala Ser Glu Met Gln Thr Val Leu Ser Ser
145 150 155

<210> 167
<211> 439
<212> PRT
<213> Homo sapiens

<400> 167
Lys Ser Leu Leu Phe Thr Ser Ser Lys Phe Pro Leu Ile Ser Phe Ser
1 5 10 15

Ser Pro Gln Gly Leu Lys Phe Arg Ser Lys Ser Ser Leu Ala Asn Tyr

```
                20                  25                  30

Leu His Lys Asn Gly Glu Thr Ser Leu Lys Pro Glu Asp Phe Asp Phe
        35                  40                  45

Thr Val Leu Ser Lys Arg Gly Ile Lys Ser Arg Tyr Lys Asp Cys Ser
    50                  55                  60

Met Ala Ala Leu Thr Ser His Leu Gln Asn Gln Ser Asn Asn Ser Asn
65                  70                  75                  80

Trp Asn Leu Arg Thr Arg Ser Lys Cys Lys Lys Asp Val Phe Met Pro
                85                  90                  95

Pro Ser Ser Ser Ser Glu Leu Gln Glu Ser Arg Gly Leu Ser Asn Phe
            100                 105                 110

Thr Ser Thr His Leu Leu Leu Lys Glu Asp Glu Gly Val Asp Asp Val
        115                 120                 125

Asn Phe Arg Lys Val Arg Lys Pro Lys Gly Lys Val Thr Ile Leu Lys
    130                 135                 140

Gly Ile Pro Ile Lys Lys Thr Lys Lys Gly Cys Arg Lys Ser Cys Ser
145                 150                 155                 160

Gly Phe Val Gln Ser Asp Ser Lys Arg Glu Ser Val Cys Asn Lys Ala
                165                 170                 175

Asp Ala Glu Ser Glu Pro Val Ala Gln Lys Ser Gln Leu Asp Arg Thr
            180                 185                 190

Val Cys Ile Ser Asp Ala Gly Ala Cys Gly Glu Thr Leu Ser Val Thr
        195                 200                 205

Ser Glu Glu Asn Ser Leu Val Lys Lys Lys Glu Arg Ser Leu Ser Ser
    210                 215                 220

Gly Ser Asn Phe Cys Ser Glu Gln Lys Thr Ser Gly Ile Ile Asn Lys
225                 230                 235                 240

Phe Cys Ser Ala Lys Asp Ser Glu His Asn Glu Lys Tyr Glu Asp Thr
                245                 250                 255

Phe Leu Glu Ser Glu Glu Ile Gly Thr Lys Val Glu Val Val Glu Arg
            260                 265                 270

Lys Glu His Leu His Thr Asp Ile Leu Lys Arg Gly Ser Glu Met Asp
        275                 280                 285

Asn Asn Cys Ser Pro Thr Arg Lys Asp Phe Thr Glu Asp Thr Ile Pro
    290                 295                 300

Arg Thr Gln Ile Glu Arg Arg Lys Thr Ser Leu Tyr Phe Ser Ser Lys
305                 310                 315                 320

Tyr Asn Lys Glu Ala Leu Ser Pro Pro Arg Arg Lys Ala Phe Lys Lys
                325                 330                 335
```

```
Trp Thr Pro Pro Arg Ser Pro Phe Asn Leu Val Gln Glu Thr Leu Phe
            340                 345                 350

His Asp Pro Trp Lys Leu Leu Ile Ala Thr Ile Phe Leu Asn Arg Thr
        355                 360                 365

Ser Gly Lys Met Ala Ile Pro Val Leu Trp Lys Phe Leu Glu Lys Tyr
    370                 375                 380

Pro Ser Ala Glu Val Ala Arg Thr Ala Asp Trp Arg Asp Val Ser Glu
385                 390                 395                 400

Leu Leu Lys Pro Leu Gly Leu Tyr Asp Leu Arg Ala Lys Thr Ile Val
                405                 410                 415

Lys Phe Ser Asp Glu Tyr Leu Thr Lys Gln Trp Lys Tyr Pro Ile Glu
            420                 425                 430

Leu His Gly Ile Gly Ala Pro
        435
```

<210> 168
<211> 90
<212> PRT
<213> Homo sapiens

<400> 168

```
Asp Cys Gly Lys Val Gln Thr Gln Met Gln Phe Ala Leu Thr Asn Phe
  1               5                  10                  15

Leu Gly Leu Ile Ser Leu Cys Lys Thr Pro Val Leu Ser Phe Leu Pro
            20                  25                  30

Gln Asp Arg Val Gln Ser Phe Leu Lys His Ala Leu Arg Cys Pro His
        35                  40                  45

Leu Arg His Cys Phe Val Asp Thr Leu Lys Gly Val His Lys Ala Lys
    50                  55                  60

Lys Ser Asp Gln Met Leu Arg Ala Ser Asn Leu Tyr Leu Thr Thr Trp
65                  70                  75                  80

Thr Trp His Trp Gln Lys Ser Leu Gln His
                85                  90
```

<210> 169
<211> 92
<212> PRT
<213> Homo sapiens

<400> 169

```
Ser Asp Phe Cys Gln Cys His Val Gln Val Val Arg Tyr Lys Leu Leu
  1               5                  10                  15

Ala Leu Ser Ile Trp Ser Asp Phe Phe Ala Leu Trp Thr Pro Leu Arg
```

20 25 30

Val Ser Thr Lys Gln Cys Leu Arg Cys Gly His Leu Arg Ala Cys Phe
35 40 45

Arg Lys Leu Cys Thr Leu Ser Cys Gly Arg Lys Glu Arg Thr Gly Val
50 55 60

Leu His Lys Glu Ile Ser Pro Arg Lys Leu Val Asn Ala Asn Cys Ile
65 70 75 80

Cys Val Cys Thr Leu Pro Gln Ser Tyr Ile Val Phe
85 90

<210> 170
<211> 91
<212> PRT
<213> Homo sapiens

<400> 170
Ala Asp Ser His Gln Asn Tyr Ile Pro Trp Pro Pro Ala Cys Val Leu
1 5 10 15

Leu Ala Arg Pro Trp Leu Ala Ser Leu Thr Arg Glu Lys Asp Leu Gln
20 25 30

Lys Ile Arg Leu Trp Asp His Phe Val Cys Ala Leu Gly Met Thr Phe
35 40 45

Phe Pro Thr Pro Gly Lys Pro Leu Gly Leu Ser Glu Thr Leu Trp Leu
50 55 60

Ala Asn His Met Val Ser Leu Lys Val Glu Arg Leu Ser Asn Pro Pro
65 70 75 80

Ile Pro Arg Glu Phe Gln Ser Val Asp Val Ile
85 90

<210> 171
<211> 95
<212> PRT
<213> Homo sapiens

<400> 171
Asn Gly Gly Leu Asn Ala His Leu Ala Ser Ala Ser Glu Phe Asp His
1 5 10 15

Ser Gly Val Gln Leu Ile Glu Arg Glu Glu Glu Ile Cys Ile Phe Tyr
20 25 30

Glu Lys Ile Asn Ile Gln Glu Lys Met Lys Leu Asn Gly Glu Ile Glu
35 40 45

Ile His Leu Leu Glu Glu Lys Ile Gln Phe Leu Lys Met Lys Ile Ala
50 55 60

Glu Lys Gln Arg Gln Ile Cys Val Thr Gln Lys Leu Leu Pro Ala Lys
65 70 75 80

Arg Ser Leu Asp Ala Asp Leu Ala Val Leu Gln Ile Gln Phe Ser
85 90 95

<210> 172
<211> 90
<212> PRT
<213> Homo sapiens

<400> 172
Lys Thr Glu Phe Gly Ala Gln Leu Gly Arg His Pro Gly Thr Ser Trp
1 5 10 15

Leu Ala Val Ile Ser Gly Ser His Lys Phe Val Phe Ala Ser Gln Gln
20 25 30

Ser Ser Phe Ser Gly Ile Gly Ser Phe Leu Pro Val Asp Val Phe Gln
35 40 45

Phe Leu His Leu Val Ser Ser Ser Leu Gly Tyr Leu Phe Phe His Lys
50 55 60

Lys Cys Ile Phe Leu Leu Pro Ala Leu Ser Ala Glu Arg His Tyr Gly
65 70 75 80

Gln Ile Gln Arg Gln Arg Leu Ser Gly His
85 90

<210> 173
<211> 102
<212> PRT
<213> Homo sapiens

<400> 173
Ala Val Arg Ser Arg Gly Ala Leu Ser Leu Ser Val Gly Ala Ala Cys
1 5 10 15

Gly Leu Val Ala Leu Trp Gln Arg Arg Arg Gln Asp Ser Gly Thr Met
20 25 30

Ser Gly Phe Ser Thr Glu Glu Arg Ala Ala Pro Phe Ser Leu Glu Tyr
35 40 45

Arg Val Phe Leu Lys Asn Glu Lys Gly Gln Tyr Ile Ser Pro Phe His
50 55 60

Asp Ile Pro Ile Tyr Ala Asp Lys Val Arg His Pro Cys Phe Trp Thr
65 70 75 80

Gln Ser Leu Tyr Ser Asp Gln Leu Val Leu His Met Asn Phe Leu Ile
85 90 95

Cys Leu Ser Thr Ser Ala
100

<210> 174
<211> 73
<212> PRT
<213> Homo sapiens

<400> 174
Val Lys Arg Leu Cys Pro Lys Thr Arg Met Pro Tyr Leu Ile Cys Ile
1 5 10 15

Asn Trp Asn Ile Met Lys Trp Arg Tyr Ile Leu Ser Phe Leu Ile Phe
20 25 30

Glu Glu Asp Ser Val Leu Gln Gly Glu Gly Arg Gly Ala Leu Leu Gly
35 40 45

Ala Glu Ala Ala His Ser Ala Gly Val Leu Pro Pro Pro Leu Pro Gln
50 55 60

Ser His Gln Pro Ala Arg Gly Ala Asp
65 70

<210> 175
<211> 130
<212> PRT
<213> Homo sapiens

<400> 175
Arg Arg Gln Arg Lys Ala Glu Pro Gly Ala Cys Ala Leu Gly Arg Val
1 5 10 15

Gly Ser Glu Cys Ile Pro Glu Pro Gly Ala Arg Arg Thr Ala Gln Ala
20 25 30

Ala Gly Leu Arg Ser Val Ser Gly Ala Ala Asn Thr Lys Val Arg Glu
35 40 45

Leu Lys His Phe Arg Phe Leu Gly Leu Leu Arg Ser Cys Arg Ser Glu
50 55 60

Met Glu Val Asp Ala Pro Gly Val Asp Gly Arg Asp Gly Leu Arg Glu
65 70 75 80

Arg Arg Gly Phe Ser Glu Gly Gly Arg Gln Asn Phe Asp Val Arg Pro
85 90 95

Gln Ser Gly Ala Asn Gly Leu Pro Lys His Ser Tyr Trp Leu Asp Leu
100 105 110

Trp Leu Phe Ile Leu Phe Asp Val Val Val Phe Leu Phe Val Tyr Phe
115 120 125

Leu Pro
130

<210> 176
<211> 62
<212> PRT
<213> Homo sapiens

<400> 176
Ile Leu Lys Met Ala Thr Asn Phe Leu Asn Lys Glu Asp Arg Thr Leu
1 5 10 15

Asn Arg Arg Ile Ser His Leu Gln Gly Thr Leu Pro Phe Ile Leu His
20 25 30

Phe Val Thr Asn Leu Gln Asn Ser Ile Asn Trp Val Gly Phe His Pro
35 40 45

Phe Leu Ala Lys Phe Leu Lys Leu Asn Pro Leu Val Arg Val
50 55 60

<210> 177
<211> 174
<212> PRT
<213> Homo sapiens

<400> 177
Ala Val Tyr Cys Ile Leu His Gln Gln Lys Val Leu Arg Leu Tyr Lys
1 5 10 15

Arg Ala Leu Arg His Leu Glu Ser Trp Cys Val Gln Arg Asp Lys Tyr
20 25 30

Arg Tyr Phe Ala Cys Leu Met Arg Ala Arg Phe Glu Glu His Lys Asn
35 40 45

Glu Lys Asp Met Ala Lys Ala Thr Gln Leu Leu Lys Glu Ala Glu Glu
50 55 60

Glu Phe Trp Tyr Arg Gln His Pro Gln Pro Tyr Ile Phe Pro Asp Ser
65 70 75 80

Pro Gly Gly Thr Ser Tyr Glu Arg Tyr Asp Cys Tyr Lys Val Pro Glu
85 90 95

Trp Cys Leu Asp Asp Trp His Pro Ser Glu Lys Ala Met Tyr Pro Asp
100 105 110

Tyr Phe Ala Lys Arg Glu Gln Trp Lys Lys Leu Arg Arg Glu Ser Trp
115 120 125

Glu Arg Glu Val Lys Gln Leu Gln Glu Glu Thr Pro Pro Gly Gly Pro
130 135 140

Leu Thr Glu Ala Leu Pro Pro Ala Arg Lys Glu Gly Asp Leu Pro Pro
145 150 155 160

Leu Trp Trp Tyr Ile Val Thr Arg Pro Arg Glu Arg Pro Met
165 170

<210> 178
<211> 131
<212> PRT
<213> Homo sapiens

<400> 178
Pro Leu Val Pro Ser Phe Pro Ser Ala Val Ser Ser Thr Val Leu Ser
1 5 10 15

Trp Gln Ser Asn Gln Asp Thr Leu Pro Ser Gln Lys Asp Ala Ser His
20 25 30

Leu Ser Thr Ile Leu Gly Pro Cys Ser Asn Arg Ile Ser His Arg Arg
35 40 45

Cys Pro Gln Glu Ser Gln Gly Arg Cys Met Ala Val Asp Ala Asp Gly
50 55 60

Thr Arg Ile Leu Pro Arg Pro Pro Ser Ala Ala Gly Trp Pro Ser Pro
65 70 75 80

Tyr Pro Phe His Ser Tyr Val Leu Gln Thr Gly Leu Ser Ser Asn Lys
85 90 95

Gln Ser Ile Gly Ile Cys Leu Ser Gly Arg Thr Thr Thr Arg Gly Gly
100 105 110

Val Ala Pro Ala Tyr Lys Ala Ala Thr Pro Phe Ala Asp Val Val Cys
115 120 125

Asn Ile Arg
130

<210> 179
<211> 80
<212> PRT
<213> Homo sapiens

<400> 179
Leu Met Met Thr Ile Tyr Ala Leu Ser Asn Glu Phe Ala Phe Lys Ile
1 5 10 15

Asn Glu Glu Gln Leu Ser Phe Phe Pro Leu Leu Ser Val Gln Leu Trp
20 25 30

His Ala Gln Arg Phe Leu Leu Asp Ser Ser Trp Ser Gly Val Ile Pro
35 40 45

Phe Phe Phe Ser Cys Ser Cys Leu Pro Phe Leu Tyr Pro Pro Lys Trp
50 55 60

Arg Gln Ile His Asp Leu Lys Asp Thr Gln Tyr Leu Leu Asn Ser Ser
65 70 75 80

<210> 180

<211> 140
<212> PRT
<213> Homo sapiens

<400> 180
Lys Val Leu Arg Lys Leu Lys Gly Pro Glu Glu Ala Ser Gly Gln Met
1 5 10 15

Ala Gly Ala Gly Pro Thr Met Leu Leu Arg Glu Glu Asn Gly Cys Cys
20 25 30

Ser Arg Arg Gln Ser Ser Ser Ser Ala Gly Asp Ser Asp Gly Glu Arg
35 40 45

Glu Asp Ser Ala Ala Glu Arg Ala Arg Gln Gln Leu Glu Ala Leu Leu
50 55 60

Asn Lys Thr Met Arg Ile Arg Met Thr Asp Gly Arg Thr Leu Val Gly
65 70 75 80

Cys Phe Leu Cys Thr Asp Arg Asp Cys Asn Val Ile Leu Gly Ser Ala
85 90 95

Gln Glu Phe Leu Lys Pro Ser Asp Ser Phe Ser Ala Gly Glu Pro Arg
100 105 110

Val Leu Gly Leu Ala Met Val Pro Gly His His Ile Val Ser Ile Glu
115 120 125

Val Gln Arg Glu Ser Leu Thr Gly Pro Pro Tyr Leu
130 135 140

<210> 181
<211> 114
<212> PRT
<213> Homo sapiens

<400> 181
Ser Leu Lys Gly Lys Arg His Arg Gly Gln Arg Tyr Gly Gly Pro Val
1 5 10 15

Arg Leu Ser Leu Cys Thr Ser Met Glu Thr Met Trp Cys Pro Gly Thr
20 25 30

Met Ala Arg Pro Ser Thr Arg Gly Ser Pro Ala Glu Lys Glu Ser Asp
35 40 45

Gly Leu Arg Asn Ser Cys Ala Glu Pro Arg Met Thr Leu Gln Ser Arg
50 55 60

Ser Val Gln Arg Lys Gln Pro Thr Ser Val Arg Pro Ser Val Met Arg
65 70 75 80

Met Arg Ile Val Leu Leu Ser Ser Ala Ser Ser Cys Cys Arg Ala Arg
85 90 95

Ser Ala Ala Glu Ser Ser Arg Ser Pro Ser Glu Ser Pro Ala Leu Glu

100 105 110

Leu Leu

<210> 182
<211> 95
<212> PRT
<213> Homo sapiens

<400> 182
Arg Leu Ser Arg Leu Thr Glu Pro Lys Glu Asp Pro Met Ala Gly Ile
1 5 10 15

Ser Thr Ala Glu His His Leu Asp Pro Thr Ala Ala Leu Pro Thr Gln
20 25 30

Leu Ser Arg Ser Arg His Ser Pro Gln Val Ile Ser Thr Asp Gly Gly
35 40 45

Glu Thr Arg Gly Cys Gly Arg Gln Glu Arg Lys Ala Glu Arg Arg Val
50 55 60

Cys Lys Asn Ala Lys Val Thr Phe Pro Ile Val Gly Gly Lys Cys Gln
65 70 75 80

Arg His Trp Phe Cys Cys His Arg Gln Ser Glu His Leu Glu Leu
85 90 95

<210> 183
<211> 131
<212> PRT
<213> Homo sapiens

<400> 183
Arg Arg Val Gln His Pro Pro Phe Phe Ser Gln Leu Ile Arg Asp Ala
1 5 10 15

Ala Lys Arg Thr Phe Arg Ile Thr Arg Leu Gln Ala Phe Ser Lys Tyr
20 25 30

Leu Val Val Tyr Val Tyr Leu Asn Gly Ser Met Leu Pro Val Pro Ser
35 40 45

Pro Cys Pro Leu Cys Gln Pro Pro Val Ala Leu Val Leu Val Ser Phe
50 55 60

Pro Ser Ser Ala Lys Arg Pro Trp Asn Leu Asn Gly Gly Cys Phe Ala
65 70 75 80

Leu Gly Gly Ser Cys Trp Trp Asp Gln Ser Phe Asp Lys Pro Pro Ala
85 90 95

Pro Trp Trp His Leu Ser Trp Lys Asp Val Thr Thr Pro Gly Ala Gln
100 105 110

Thr Ala Cys Gly Ser Arg Thr Ser Ala Phe Gly Ile Phe Leu Pro Gln

115 120 125

Trp Gly Arg
130

<210> 184
<211> 128
<212> PRT
<213> Homo sapiens

<400> 184
Thr Ala Pro Cys Cys Arg Cys Pro Ala Pro Val Pro Ser Val Asn Pro
1 5 10 15

Leu Ser Leu Trp Cys Trp Phe Arg Ser Arg Leu Gln Gln Asn Asp Leu
20 25 30

Gly Thr Ser Met Gly Ala Ala Leu Leu Trp Glu Val Leu Val Gly Gly
35 40 45

Thr Arg Ala Leu Thr Asn Leu Leu Leu Leu Gly Gly Thr Ser Pro Gly
50 55 60

Arg Thr Ser Gln Leu Gln Val Leu Arg Leu Pro Val Ala Ala Glu Pro
65 70 75 80

Val Pro Leu Ala Phe Ser Ser His Asn Gly Glu Gly Asp Phe Gly Ile
85 90 95

Leu Thr Asn Ser Ser Leu Gly Leu Ser Leu Leu Pro Ser Thr Ala Ser
100 105 110

Arg Phe Ser Ser Ile Cys Ala Tyr Tyr Leu Arg Thr Val Ser Ala Pro
115 120 125

<210> 185
<211> 75
<212> PRT
<213> Homo sapiens

<400> 185
Asp Ser Arg Val Tyr Cys Phe Ser Gly Asn Tyr Arg Lys Leu Val Leu
1 5 10 15

Pro Arg Lys Thr Gly Ala Ile Arg Asn Gly Ser Asn Ile Ser Lys Leu
20 25 30

Arg Lys Gln Asp Val Leu Ser Phe Ala His Leu Gly Phe Leu Leu Phe
35 40 45

Pro Phe Ser Leu Phe Ser Leu Arg Ser Leu Phe Gln Phe Pro Ser Asp
50 55 60

Leu Pro Leu Val Pro Leu Glu Ser Gln Arg Leu
65 70 75

<210> 186
<211> 62
<212> PRT
<213> Homo sapiens

<400> 186
Leu Gly Asp Ser Glu Ser Met Pro Leu Leu Ala Leu Lys Cys Pro Val
1 5 10 15

Arg Leu Leu Gly Thr Leu Glu Pro Ser Glu Ile Leu Ile Ile Leu Gly
20 25 30

Ser Ser Pro Tyr Phe Gln Met Phe Ser Ala Gln His Trp Val Leu Ser
35 40 45

Ser Thr Thr Glu Asn Pro Glu Glu Lys Gly Arg Cys Phe Pro
50 55 60

<210> 187
<211> 89
<212> PRT
<213> Homo sapiens

<400> 187
Pro His Pro Ser Arg Arg Leu Thr Gln Gly Arg Trp Val Arg Lys Ser
1 5 10 15

Arg Val Ala Met Glu Lys Ile Pro Val Ser Ala Phe Leu Arg Leu Val
20 25 30

Ala Leu Ser Tyr Asn Leu Ala Arg Asp Ser Thr Val Lys Pro Gly Ala
35 40 45

Lys Lys Asp Arg Lys Glu Ser Arg Ala Lys Leu Arg Gln Thr Leu Ser
50 55 60

Arg Ser Trp Gly Glu Gln Leu Ile Trp Thr Gln Thr Tyr Glu Glu Ala
65 70 75 80

Leu Tyr Lys Ser Arg Leu Ala Thr Asn
85

<210> 188
<211> 72
<212> PRT
<213> Homo sapiens

<400> 188
Gly Asn Pro Glu Leu Pro Trp Arg Lys Phe Gln Cys Gln His Ser Cys
1 5 10 15

Ala Leu Trp Arg Ser Pro Thr Ile Trp Pro Gly Ile Ala Gln Ser Asn
20 25 30

Leu Glu Pro Lys Arg Thr Gly Arg Ser Leu Glu Pro Asn Cys Ala Arg

35 40 45

Pro Ser Pro Glu Val Gly Val Asn Asn Ser Ser Gly Leu Arg Arg Met
50 55 60

Lys Lys Leu Tyr Ile Asn Arg Asp
65 70

<210> 189
<211> 125
<212> PRT
<213> Homo sapiens

<400> 189
Ser Leu Gly His Arg Pro Arg Asn Gly Gly His Ser Arg Gly Cys Asp
1 5 10 15

Leu Gly Gly Leu His Ala His Ser Pro Asp Pro Arg Leu Gln Gly Ala
20 25 30

Gly Leu Gln Gln Ala Lys Asn Ala Ala Tyr Ser Val Ser Leu Pro Pro
35 40 45

Gly Cys Val Gly His Leu Trp Pro His Leu Arg Leu His His Arg Thr
50 55 60

Gly Arg Glu His Arg Ala His Thr Leu Leu Pro Leu Trp Asp Pro Leu
65 70 75 80

Phe His Leu Leu Leu Leu Pro Ala Gly Ser Cys Cys Gln Ser Asp Gln
85 90 95

Ala Arg Pro Gly Glu Glu Ala Pro Phe Pro Val Gly Asp Ser Gly Ser
100 105 110

Gly Arg Gly Leu Gln Pro Ser Pro Gly Cys Tyr Arg Tyr
115 120 125

<210> 190
<211> 200
<212> PRT
<213> Homo sapiens

<400> 190
Arg Gly Arg Asp Ser Cys Pro Arg Ser Pro Pro Ala Leu Arg Ser Ser
1 5 10 15

Pro Ala Ala Leu Leu Arg Ala Gly Ser Ser Thr Lys Phe Thr Ala Asn
20 25 30

Ala Leu Ala Leu Gly Ser Arg Met Ala Thr Thr Val Pro Asp Gly Cys
35 40 45

Arg Asn Gly Leu Lys Ser Lys Tyr Tyr Arg Leu Cys Asp Lys Ala Glu
50 55 60

```
Ala Trp Gly Ile Val Leu Glu Thr Val Ala Thr Ala Gly Val Val Thr
 65                  70                  75                  80

Ser Val Ala Phe Met Leu Thr Leu Pro Ile Leu Val Cys Lys Val Gln
                 85                  90                  95

Asp Ser Asn Arg Arg Lys Met Leu Pro Thr Gln Phe Leu Phe Leu Leu
            100                 105                 110

Gly Val Leu Gly Ile Phe Gly Leu Thr Phe Ala Phe Ile Ile Gly Leu
        115                 120                 125

Asp Gly Ser Thr Gly Pro Thr Arg Phe Phe Leu Phe Gly Ile Leu Phe
    130                 135                 140

Ser Ile Cys Phe Ser Cys Leu Leu Ala His Ala Val Ser Leu Thr Lys
145                 150                 155                 160

Leu Val Arg Gly Arg Lys Pro Leu Ser Arg Leu Val Ile Leu Gly Leu
                165                 170                 175

Ala Val Gly Phe Ser Leu Val Gln Asp Val Ile Ala Ile Glu Tyr Ile
            180                 185                 190

Val Leu Thr Met Asn Arg Thr Lys
        195                 200
```

<210> 191
<211> 111
<212> PRT
<213> Homo sapiens

<400> 191

```
Ala Glu Ala His Gly Gln Thr Gln Asn His Gln Pro Gly Lys Gly Leu
  1               5                  10                  15

Pro Pro Pro Asp Glu Leu Gly Gln Thr Asp Ser Met Ser Gln Gln Ala
            20                  25                  30

Gly Glu Ala Asp Gly Lys Glu Asp Pro Lys Glu Glu Glu Ala Cys Gly
        35                  40                  45

Pro Cys Ala Pro Val Gln Ser Asp Asp Glu Gly Glu Gly Glu Ala Lys
    50                  55                  60

Asp Ala Gln His Thr Gln Glu Glu Glu Lys Leu Ser Arg Gln His Phe
65                  70                  75                  80

Ser Pro Val Gly Val Leu His Leu Ala Asp Glu Asp Arg Glu Ser Glu
                85                  90                  95

His Glu Gly His Arg Gly His Asn Pro Gly Cys Gly His Arg Phe
            100                 105                 110
```

<210> 192
<211> 92

<212> PRT
<213> Homo sapiens

<400> 192
Glu Ile Tyr Trp Glu Thr Asp Tyr Asn His Ser Gly Thr Ile Asp Ala
1 5 10 15

His Glu Met Arg Thr Ala Leu Arg Lys Ala Gly Phe Thr Leu Asn Ser
20 25 30

Gln Val Gln Gln Thr Ile Ala Leu Arg Tyr Ala Cys Ser Lys Leu Gly
35 40 45

Ile Asn Phe Asp Ser Phe Val Ala Cys Met Ile Arg Leu Glu Thr Leu
50 55 60

Phe Lys Leu Phe Ser Leu Leu Asp Glu Asp Lys Asp Gly Met Val Gln
65 70 75 80

Leu Ser Leu Ala Glu Trp Leu Cys Cys Val Leu Val
85 90

<210> 193
<211> 81
<212> PRT
<213> Homo sapiens

<400> 193
Glu Ser Leu Ile Ala Phe Leu Phe Leu His Asp Gln Cys Ala Gln Asp
1 5 10 15

Ser Ile Val Leu Thr Met Ile Lys Asp Val Val Arg Ile Gln Trp Thr
20 25 30

Arg Asn Glu Cys Lys Gly Gly Leu Glu Gln Arg Arg Gly Cys Pro Glu
35 40 45

Gly Lys Glu Ser Tyr Gln Ile Leu Leu Asn Leu Gln Pro Glu Arg Leu
50 55 60

Glu Phe His Arg Pro Gln Ser Ala Pro Phe His Cys Ser Arg His Ile
65 70 75 80

Lys

<210> 194
<211> 82
<212> PRT
<213> Homo sapiens

<400> 194
Lys Thr Thr Ile His Gly Pro Cys Gln Asn His Leu Pro Pro Pro His
1 5 10 15

Cys Phe Leu Lys Arg Pro Gly Thr Leu Ser Lys Gly Asp Pro Ile Asp
20 25 30

```
Ser Ser Gln Glu Gly Phe Arg Ala Ser Ile Arg Ala Trp Pro Val Leu
         35                  40                  45

Ala Pro Leu Leu Ser Glu Gln Gln Gly Phe Gln Gly Ser Gly Trp His
     50                  55                  60

Glu Ser Leu Ser Leu Pro Ser Cys Ser Phe Met Thr Asn Val Pro Arg
 65                  70                  75                  80

Thr Gln
```

<210> 195
<211> 25
<212> PRT
<213> Homo sapiens

<400> 195

```
Arg Pro Pro Pro Ser Ser Arg Ser Ser Leu Ala Gly Gln Thr Asn Thr
  1               5                  10                  15

Gln His Ser His Ser Ala Arg Glu Ser
             20                  25
```

<210> 196
<211> 71
<212> PRT
<213> Homo sapiens

<400> 196

```
Thr Met Pro Ser Leu Ser Ser Ser Arg Arg Leu Asn Ser Leu Lys Arg
  1               5                  10                  15

Val Ser Arg Arg Ile Ile Gln Ala Thr Lys Leu Ser Lys Leu Met Pro
             20                  25                  30

Ser Leu Leu His Ala Tyr Arg Arg Ala Met Val Cys Cys Thr Trp Leu
         35                  40                  45

Leu Arg Val Lys Pro Ala Phe Leu Arg Ala Val Leu Ile Ser Trp Ala
     50                  55                  60

Ser Met Val Pro Glu Trp Leu
 65                  70
```

<210> 197
<211> 86
<212> PRT
<213> Homo sapiens

<400> 197

```
Ile Arg Arg Asn Thr Ser Arg Ile Ser Val His Thr Trp Arg Arg Thr
  1               5                  10                  15

Pro Pro Tyr Asp Ser Pro Ala Cys Phe Ser Cys Ser Ile Val Ser Leu
```

20 25 30

Glu Gly Ser Gly Phe Phe Ser Cys Val Ser Val Phe Phe Ser Phe Asp
35 40 45

Leu Ser Asn Phe Ser Ile Ser Ala Ile Ser Gly Leu Ser Asp Met Val
50 55 60

Ala Glu Glu Lys Gln Ser Glu Ala His Glu Tyr Glu Arg Gln Phe Leu
65 70 75 80

Ala Ser Arg Arg Ser Gly
85

<210> 198
<211> 101
<212> PRT
<213> Homo sapiens

<400> 198
His Pro Phe Ser Thr Phe Pro Thr Leu Pro Pro Gln Ala Gly Lys Phe
1 5 10 15

Asp Ala Thr Leu Leu Ala Ser Gln Cys Ile Leu Gly Gly Ala Arg Leu
20 25 30

Leu Thr Ile Arg Leu Leu Ala Ser Pro Val Gln Ser Phe Leu Trp Lys
35 40 45

Ala Val Asp Phe Ser Leu Ala Ser Leu Ser Ser Ser Val Ser Thr Tyr
50 55 60

Arg Ile Ser Arg Ser Gln Pro Tyr Arg Val Cys Gln Thr Trp Leu Arg
65 70 75 80

Arg Lys Ser Lys Ala Arg Arg Thr Ser Thr Ser Asp Ser Ser Ser Arg
85 90 95

Leu Ala Ala Val Ala
100

<210> 199
<211> 100
<212> PRT
<213> Homo sapiens

<400> 199
Thr Pro Phe Pro Pro Ser Gln Leu Tyr Pro Leu Lys Gln Val Asn Ser
1 5 10 15

Thr Gln His Phe Ser His Leu Ser Ala Tyr Leu Ala Ala His Ala Ser
20 25 30

Leu Arg Phe Ala Cys Leu Leu Leu Leu Phe Asn Arg Phe Phe Gly Arg
35 40 45

```
Gln Trp Ile Phe Leu Leu Arg Leu Cys Leu Leu Gln Phe Arg Leu Ile
     50                  55                  60

Glu Phe Leu Asp Leu Ser His Ile Gly Phe Val Arg His Gly Cys Gly
 65                  70                  75                  80

Gly Lys Ala Lys Arg Gly Ala Arg Val Arg Ala Thr Val Pro Arg Val
                 85                  90                  95

Ser Pro Gln Trp
            100
```

<210> 200
<211> 153
<212> PRT
<213> Homo sapiens

<400> 200

```
Gly Leu Thr Asp Gln Tyr Leu Glu Leu Asn Ala Leu Gln Glu Glu Leu
  1               5                  10                  15

Gly Pro Phe Gly Leu Val Ile Leu Gly Phe Pro Ser Asn Gln Phe Gly
            20                  25                  30

Lys Gln Glu Pro Gly Glu Asn Ser Glu Ile Leu Pro Ser Leu Lys Tyr
        35                  40                  45

Val Arg Pro Gly Gly Gly Phe Val Pro Asn Phe Gln Leu Phe Glu Lys
     50                  55                  60

Gly Asp Val Asn Gly Glu Lys Glu Gln Lys Phe Tyr Thr Phe Leu Lys
 65                  70                  75                  80

Asn Ser Cys Pro Pro Thr Ala Glu Leu Leu Gly Ser Pro Gly Arg Leu
                 85                  90                  95

Phe Trp Glu Pro Met Lys Ile His Asp Ile Arg Trp Asn Phe Glu Lys
            100                 105                 110

Phe Leu Val Gly Pro Asp Gly Ile Pro Val Met Arg Trp Tyr His Arg
        115                 120                 125

Thr Thr Val Ser Asn Val Lys Met Asp Ile Leu Ser Tyr Met Arg Arg
    130                 135                 140

Gln Ala Ala Leu Ser Ala Arg Gly Lys
145                 150
```

<210> 201
<211> 249
<212> PRT
<213> Homo sapiens

<400> 201

```
Leu Met Pro Pro Pro Tyr Pro Tyr Pro Leu Pro Ile Met Gln Gly Pro
  1               5                  10                  15
```

```
Arg Arg Gly Ser Ser Gly Arg Lys Pro His Ser Gln Ser Phe Tyr Pro
            20                  25                  30

His Pro Arg Phe Ser Phe Leu Leu His Lys Arg Gln Ala Trp His Asn
        35                  40                  45

Cys Val Ser Glu Pro Leu Trp Thr Arg Asp Asn Cys Pro Ser Val Cys
    50                  55                  60

Met Ala Thr Gln Pro Arg Ile Cys Leu Leu Glu Thr Gln Gly Trp Ser
65                  70                  75                  80

Ile Cys Val Tyr Gly Leu Ala Gln His Pro His Ile Phe Phe Ser Phe
                85                  90                  95

Leu Phe Gln Met Ser Pro Lys Glu Thr Gln Val Leu Gly Pro Met Val
            100                 105                 110

Leu Leu Lys Pro Glu His His Ser Trp Gly Gln His Leu Pro His Ala
        115                 120                 125

His Thr Thr His His Gln Pro Pro Ser Ser Phe Leu Lys Asp Pro Pro
    130                 135                 140

Glu Pro Pro Ser Pro Ser His Ser Ala Pro Glu Thr Ser Gln Asp Asn
145                 150                 155                 160

Cys Glu Arg Asp Gly Arg Val Pro Gln Val Arg Gly Gly Val Ser Met
                165                 170                 175

Lys Glu Gly Pro Glu Ala Leu Val Gly Gly Pro Pro Leu Ser Pro Ser
            180                 185                 190

Val Val Pro Ala Leu Ser Ala Phe Arg Leu Arg Leu Pro Gly Arg Asp
        195                 200                 205

Thr Thr Pro Ala Pro Leu Glu Asp Met Leu Ser Ser His Ser Val His
    210                 215                 220

Trp Tyr Leu Asn Thr Pro Ile Cys Pro Val Lys Val Phe Leu Gln Gln
225                 230                 235                 240

Lys Lys Lys Arg Lys Lys Lys Lys Lys
                245
```

<210> 202
<211> 156
<212> PRT
<213> Homo sapiens

<400> 202

```
Ala Gly Leu Ser Ala Pro Pro Pro Ala Pro Leu Leu Cys Arg Ala Gln
  1               5                  10                  15

Ala Pro Leu Ala Leu Gly Pro Asn Phe Ser Tyr Arg His Gly Val Arg
            20                  25                  30
```

```
Pro Gly Ser Ser Pro Gly Ala His Leu Pro Glu Ala Arg Cys Gly Gly
         35                  40                  45

Gly Pro Arg Gly Arg Ser Gln Ala Gln Ser Pro Gln Ser Ser Gly Pro
     50                  55                  60

Val Gly Gly Arg Gly Arg Ser Gly Ser Lys Ala Arg Thr Pro Gln Leu
 65                  70                  75                  80

Phe Arg Leu Gln Gln Gln Leu Gln Arg Phe Gly His Gly Cys Glu Val
                 85                  90                  95

Pro Arg Cys Trp Leu Gln Ala Ala Arg Glu His Pro Gly Gln Gly Gln
            100                 105                 110

Glu Ala Gln Ser Glu Glu Glu Gly Glu Gly Gln Glu Gly Glu Gly Gln
        115                 120                 125

Glu Glu Gly Gly Ser Pro Leu Lys Gly Pro Gly Gln Gly Ser Leu Asn
    130                 135                 140

Leu Pro Leu Cys Leu Arg Val Pro Thr Thr Trp Ser
145                 150                 155
```

<210> 203
<211> 113
<212> PRT
<213> Homo sapiens

<400> 203

```
Asp Pro Thr Ser Leu Thr Ala Met Glu Phe Asp Leu Gly Ala Ala Leu
  1               5                  10                  15

Glu Pro Thr Ser Gln Lys Pro Gly Val Gly Ala Gly His Gly Gly Asp
            20                  25                  30

Pro Lys Leu Ser Pro His Lys Val Gln Gly Arg Ser Glu Ala Gly Ala
        35                  40                  45

Gly Pro Gly Pro Lys Gln Gly His His Ser Ser Ser Asp Ser Ser Ser
    50                  55                  60

Ser Ser Ser Asp Ser Asp Thr Asp Val Lys Ser His Ala Ala Gly Ser
65                  70                  75                  80

Lys Gln His Glu Ser Ile Pro Gly Lys Ala Lys Lys Pro Lys Val Lys
                85                  90                  95

Lys Lys Glu Lys Gly Lys Lys Glu Lys Gly Lys Lys Lys Glu Ala Pro
            100                 105                 110

His
```

<210> 204
<211> 162

<212> PRT
<213> Homo sapiens

<400> 204
Gly Gly Pro Pro Pro Pro Lys His Leu Ser Ser Arg Trp Leu Val Leu
1 5 10 15

Val Gly Arg Glu Glu Gly Leu Met Ser Pro Val Gln Gly Pro Ser Val
20 25 30

Gly Ser Leu Leu Leu Leu Ala Leu Leu Leu Leu Ala Leu Leu Leu Leu
35 40 45

Leu His Phe Gly Leu Leu Gly Leu Ala Arg Asp Ala Leu Val Leu Leu
50 55 60

Gly Ala Ser Ser Val Gly Leu His Ile Arg Val Arg Ile Ala Gly Ala
65 70 75 80

Ala Ala Gly Val Gly Arg Ala Val Val Ser Leu Leu Trp Thr Arg Thr
85 90 95

Cys Pro Cys Leu Arg Pro Ala Leu Asn Phe Val Gly Thr Glu Leu Gly
100 105 110

Ile Ser Pro Val Ala Arg Pro His Thr Gly Leu Leu Gly Gly Gly Leu
115 120 125

Gln Gly Cys Ser Gln Val Glu Leu His Gly Gly Lys Arg Ser Trp Val
130 135 140

Leu Arg Pro Arg Ala Pro Gly Pro Cys Arg Gly Ala Glu Gln Gly Glu
145 150 155 160

Glu Arg

<210> 205
<211> 145
<212> PRT
<213> Homo sapiens

<400> 205
Val Glu Pro Trp Thr Thr Cys Arg Ala Ala Gly Ala Val Met Ala Asp
1 5 10 15

Tyr Trp Lys Ser Gln Pro Lys Lys Phe Cys Asp Tyr Cys Lys Cys Trp
20 25 30

Ile Ala Asp Asn Arg Pro Ser Val Glu Phe His Glu Arg Gly Lys Asn
35 40 45

His Lys Glu Asn Val Ala Lys Arg Ile Ser Glu Ile Lys Gln Lys Ser
50 55 60

Leu Asp Lys Ala Lys Glu Glu Glu Lys Ala Ser Lys Glu Phe Ala Ala
65 70 75 80

```
Met Glu Ala Ala Ala Leu Lys Ala Tyr Gln Glu Asp Leu Lys Arg Leu
                 85                  90                  95

Gly Leu Glu Ser Glu Ile Leu Glu Pro Ser Ile Thr Pro Val Thr Ser
            100                 105                 110

Thr Ile Pro Pro Thr Ser Thr Ser Asn Gln Gln Lys Glu Lys Lys Glu
        115                 120                 125

Lys Lys Lys Lys Arg Ser Phe Lys Gly Gln Met Gly Arg Arg His Asn
    130                 135                 140

Leu
145
```

<210> 206
<211> 262
<212> PRT
<213> Homo sapiens

<400> 206

```
Pro Ala Leu Ser His Leu Pro Arg His Gln Ile Asn Arg Lys Lys Arg
  1               5                  10                  15

Lys Arg Arg Arg Lys Lys Asp Pro Ser Lys Gly Arg Trp Val Glu Gly
            20                  25                  30

Ile Thr Ser Glu Gly Tyr His Tyr Tyr Tyr Asp Leu Ile Ser Gly Ala
        35                  40                  45

Ser Gln Trp Glu Lys Pro Glu Gly Phe Gln Gly Asp Leu Lys Lys Thr
     50                  55                  60

Ala Val Lys Thr Val Trp Val Glu Gly Leu Ser Glu Asp Gly Phe Thr
 65                  70                  75                  80

Tyr Tyr Tyr Asn Thr Glu Thr Gly Glu Ser Arg Trp Glu Lys Pro Asp
                 85                  90                  95

Asp Phe Ile Pro His Thr Ser Asp Leu Pro Ser Ser Lys Val Asn Glu
            100                 105                 110

Asn Ser Leu Gly Thr Leu Asp Glu Ser Lys Ser Ser Asp Ser His Ser
        115                 120                 125

Asp Ser Asp Gly Glu Gln Glu Ala Glu Glu Gly Gly Val Ser Thr Glu
    130                 135                 140

Thr Glu Lys Pro Lys Ile Lys Phe Lys Glu Lys Asn Lys Asn Ser Asp
145                 150                 155                 160

Gly Gly Ser Asp Pro Glu Thr Gln Lys Glu Lys Ser Ile Gln Lys Gln
                165                 170                 175

Asn Ser Leu Gly Ser Asn Glu Glu Lys Ser Lys Thr Leu Lys Lys Ser
            180                 185                 190
```

```
Asn Pro Tyr Gly Glu Trp Gln Glu Ile Lys Gln Glu Val Glu Ser His
        195                 200                 205

Glu Glu Val Asp Leu Glu Leu Pro Ser Thr Glu Asn Glu Tyr Val Ser
    210                 215                 220

Thr Ser Glu Ala Asp Gly Gly Gly Glu Pro Lys Val Val Phe Lys Glu
225                 230                 235                 240

Lys Thr Val Thr Ser Leu Gly Val Met Ala Asp Gly Val Ala Pro Val
                245                 250                 255

Phe Lys Lys Arg Arg Thr
            260


<210> 207
<211> 73
<212> PRT
<213> Homo sapiens

<400> 207
Gly Lys Gly Arg Arg Lys Gly Ile Lys Gly Val Cys Cys Asn Gly Gly
  1               5                  10                  15

Ser Cys Pro Glu Ser Ile Pro Arg Gly Phe Glu Lys Thr Trp Leu Arg
             20                  25                  30

Val Arg Asn Phe Gly Ala Lys His Asn Thr Ser Asn Gln His Tyr Pro
         35                  40                  45

Thr Tyr Leu Asp Ile Lys Ser Thr Glu Arg Lys Glu Arg Glu Glu Glu
     50                  55                  60

Lys Lys Ile Leu Gln Arg Ala Asp Gly
 65                  70


<210> 208
<211> 68
<212> PRT
<213> Homo sapiens

<400> 208
Ile Trp Asn Phe Gln Ala Leu Lys Met Ser Met Tyr Gln Leu Gln Lys
  1               5                  10                  15

Leu Met Val Ala Glu Asn Pro Lys Trp Tyr Leu Lys Lys Lys Gln Ser
             20                  25                  30

Leu Leu Leu Glu Leu Trp Gln Met Glu Trp Pro Gln Ser Ser Lys Arg
         35                  40                  45

Glu Glu Leu Glu Asn Gly Lys Ile Leu Gly Lys Phe Lys Gly Asn Glu
     50                  55                  60

Val Met Ile Gln
 65
```

<210> 209

<400> 209
000

<210> 210
<211> 194
<212> PRT
<213> Homo sapiens

<400> 210
Ser Val His Cys Phe Arg Glu Asp Lys Met Lys Phe Thr Ile Val Phe
1 5 10 15

Ala Gly Leu Leu Gly Val Phe Leu Ala Pro Ala Leu Ala Asn Tyr Asn
20 25 30

Ile Asn Val Asn Asp Asp Asn Asn Asn Ala Gly Ser Gly Gln Gln Ser
35 40 45

Val Ser Val Asn Asn Glu His Asn Val Ala Asn Val Asp Asn Asn Asn
50 55 60

Gly Trp Asp Ser Trp Asn Ser Ile Trp Asp Tyr Gly Asn Gly Phe Ala
65 70 75 80

Ala Thr Arg Leu Phe Gln Lys Lys Thr Cys Ile Val His Lys Met Asn
85 90 95

Lys Glu Val Met Pro Ser Ile Gln Ser Leu Asp Ala Leu Val Lys Glu
100 105 110

Lys Lys Leu Gln Gly Lys Gly Pro Gly Gly Pro Pro Pro Lys Gly Leu
115 120 125

Met Tyr Ser Val Asn Pro Asn Lys Val Asp Asp Leu Ser Lys Phe Gly
130 135 140

Lys Asn Ile Ala Asn Met Cys Arg Gly Ile Pro Thr Tyr Met Ala Glu
145 150 155 160

Glu Met Gln Glu Ala Ser Leu Phe Phe Tyr Ser Gly Thr Cys Tyr Thr
165 170 175

Thr Ser Val Leu Trp Ile Val Asp Ile Ser Phe Cys Gly Asp Thr Val
180 185 190

Glu Asn

<210> 211
<211> 82
<212> PRT
<213> Homo sapiens

<400> 211
Val His Gln Ala Leu Gly Arg Trp Ser Ser Trp Ser Leu Thr Leu Lys
1 5 10 15

Leu Leu Phe Leu Asp Gln Cys Ile Lys Gly Leu Asn Gly Gly His Asp
20 25 30

Phe Leu Val His Phe Val His Asn Ala Cys Leu Leu Leu Lys Glu Ser
35 40 45

Gly Cys Ser Lys Ala Ile Ser Ile Ile Pro Asp Gly Ile Pro Gly Val
50 55 60

Pro Ser Val Val Ile Val Asn Ile Gly His Ile Val Phe Ile Val Asp
65 70 75 80

Thr His

<210> 212
<211> 119
<212> PRT
<213> Homo sapiens

<400> 212
Glu Leu Gly Leu Asn His Leu Trp Leu Arg Val Trp Leu Glu Pro Thr
1 5 10 15

Ala Gln Val Pro Asp Val Leu Phe Pro Glu Phe Met Glu Arg Glu Glu
20 25 30

Lys Ala Val Ser Leu Leu Leu Trp Phe Asn Val Lys Glu Pro Gln Leu
35 40 45

Pro Pro Leu Pro Gly Arg Glu Ala Phe Gly Phe Leu Leu Leu Leu Leu
50 55 60

Ala Leu Val Ala Gly Glu Val Leu Gln Asp His Arg Leu Ala Leu Gln
65 70 75 80

Leu Val Leu Ala Gly Leu Arg Ala His Ala Gly Arg Leu Arg Phe Arg
85 90 95

Lys Ala Leu Thr Lys Ala Ser Ala Arg Cys Ala Pro Glu Gly Trp Thr
100 105 110

Ser Glu Ser Phe Ala Ser Phe
115

<210> 213
<211> 136
<212> PRT
<213> Homo sapiens

<400> 213
Ile Ile Cys Gly Cys Val Ser Gly Leu Ser Pro Leu His Arg Ser Leu
1 5 10 15

```
Met Tyr Cys Phe Gln Ser Ser Trp Arg Gly Arg Lys Arg Leu Tyr Leu
             20                  25                  30

Cys Cys Ser Gly Leu Met Ser Lys Ser Arg Ser Ser Leu Leu Cys Leu
         35                  40                  45

Ala Glu Lys Pro Leu Ala Phe Phe Phe Phe Ser Leu Arg Leu Trp Arg
     50                  55                  60

Val Lys Tyr Ser Arg Thr Thr Ala Leu Arg Cys Ser Trp Ser Ser Arg
 65                  70                  75                  80

Ala Cys Gly Leu Met Arg Gly Val Cys Ala Ser Gly Arg Pro Ser Arg
                 85                  90                  95

Arg Pro Arg Pro Ala Val Leu Leu Lys Ala Gly His Arg Ser His Ser
            100                 105                 110

Pro Leu Ser Glu Thr Met His Gly Arg Ser His Ser Ser Phe Ser Asp
        115                 120                 125

Arg Phe Arg Arg Ser Leu Met Thr
    130                 135
```

<210> 214
<211> 101
<212> PRT
<213> Homo sapiens

<400> 214

```
Thr Leu Glu Thr Val His Gln Gly Pro Val Gln Trp Ala Gln Ala Arg
  1               5                  10                  15

His Ala Ala Thr Asp Asp Ser Gly Gln Ala Leu Lys Gly Arg Ser Ser
             20                  25                  30

Arg Gly Tyr Tyr Phe Ser Asp Lys Ile Gln Met Pro Leu Leu Cys Gly
         35                  40                  45

Tyr Tyr Arg Asn Pro Ser Thr Gly Asn Lys Ala His Phe Gln Asn Tyr
     50                  55                  60

His Gln Arg Arg Pro Pro Glu Ser Tyr Pro Gln Ala Lys Leu Arg Val
 65                  70                  75                  80

His Cys Gly Asn Arg Trp Leu Tyr Phe Leu His Leu Arg Glu Gln Ile
                 85                  90                  95

Pro Ala Ser Val Lys
            100
```

<210> 215
<211> 204
<212> PRT
<213> Homo sapiens

<400> 215
Leu Arg Cys Pro Ala Phe Arg Ser Thr Ala Gly Arg Gly Leu Arg Glu
1 5 10 15

Gly Leu Pro Glu Ala Gln Thr Pro Arg Met Ser Pro Gln Ala Arg Glu
20 25 30

Asp Gln Leu Gln Arg Lys Ala Val Val Leu Glu Tyr Phe Thr Arg His
35 40 45

Lys Arg Lys Glu Lys Lys Lys Lys Ala Lys Gly Phe Ser Ala Arg Gln
50 55 60

Arg Arg Glu Leu Arg Leu Phe Asp Ile Lys Pro Glu Gln Gln Arg Tyr
65 70 75 80

Ser Leu Phe Leu Pro Leu His Glu Leu Trp Lys Gln Tyr Ile Arg Asp
85 90 95

Leu Cys Ser Gly Leu Lys Pro Asp Thr Gln Pro Gln Met Ile Gln Ala
100 105 110

Lys Leu Leu Lys Ala Asp Leu His Gly Ala Ile Ile Ser Val Thr Lys
115 120 125

Ser Lys Cys Pro Ser Tyr Val Gly Ile Thr Gly Ile Leu Leu Gln Glu
130 135 140

Thr Lys His Ile Phe Lys Ile Ile Thr Lys Glu Asp Arg Leu Lys Val
145 150 155 160

Ile Pro Lys Leu Asn Cys Val Phe Thr Val Glu Thr Asp Gly Phe Ile
165 170 175

Ser Tyr Ile Tyr Gly Ser Lys Phe Gln Leu Arg Ser Ser Glu Arg Ser
180 185 190

Ala Lys Lys Phe Lys Ala Lys Gly Thr Ile Asp Leu
195 200

<210> 216
<211> 645
<212> PRT
<213> Homo sapiens

<400> 216
Pro Thr Arg Pro Val Ala Ala Gly Ser Glu Gln Gln Gln Gln Ser Ala
1 5 10 15

Phe Ile Gln Glu Arg Gln Pro Val Ala Leu Met Arg Leu Leu Ser Phe
20 25 30

Asn Val Pro His Ile Lys Asn Ser Thr Gly Glu Pro Ile Trp Lys Val
35 40 45

Leu Ile Tyr Asp Arg Phe Gly Gln Asp Ile Ile Ser Pro Leu Leu Ser

```
     50                  55                  60

Val Lys Glu Leu Arg Asp Met Gly Ile Thr Leu His Leu Leu Leu His
 65                  70                  75                  80

Ser Asp Arg Asp Pro Ile Pro Asp Val Pro Ala Val Tyr Phe Val Met
                 85                  90                  95

Pro Thr Glu Glu Asn Ile Asp Arg Met Cys Gln Asp Leu Arg Asn Gln
            100                 105                 110

Leu Tyr Glu Ser Tyr Tyr Leu Asn Phe Ile Ser Ala Ile Ser Arg Ser
        115                 120                 125

Lys Leu Glu Asp Ile Ala Asn Ala Ala Leu Ala Ala Ser Ala Val Thr
    130                 135                 140

Gln Val Ala Lys Val Phe Asp Gln Tyr Leu Asn Phe Ile Thr Leu Glu
145                 150                 155                 160

Asp Asp Met Phe Val Leu Cys Asn Gln Asn Lys Glu Leu Val Ser Tyr
                165                 170                 175

Arg Ala Ile Asn Arg Pro Asp Ile Thr Asp Thr Glu Met Glu Thr Val
            180                 185                 190

Met Asp Thr Ile Val Asp Ser Leu Phe Cys Phe Phe Val Thr Leu Gly
        195                 200                 205

Ala Val Pro Ile Ile Arg Cys Ser Arg Gly Thr Ala Ala Glu Met Val
    210                 215                 220

Ala Val Lys Leu Asp Lys Lys Leu Arg Glu Asn Leu Arg Asp Ala Arg
225                 230                 235                 240

Asn Ser Leu Phe Thr Gly Asp Thr Leu Gly Ala Gly Gln Phe Ser Phe
                245                 250                 255

Gln Arg Pro Leu Leu Val Leu Val Asp Arg Asn Ile Asp Leu Ala Thr
            260                 265                 270

Pro Leu His His Thr Trp Thr Tyr Gln Ala Leu Val His Asp Val Leu
        275                 280                 285

Asp Phe His Leu Asn Arg Val Asn Leu Glu Glu Ser Ser Gly Val Glu
    290                 295                 300

Asn Ser Pro Ala Gly Ala Arg Pro Lys Arg Lys Asn Lys Lys Ser Tyr
305                 310                 315                 320

Asp Leu Thr Pro Val Asp Lys Phe Trp Gln Lys His Lys Gly Ser Pro
                325                 330                 335

Phe Pro Glu Val Ala Glu Ser Val Gln Gln Glu Leu Glu Ser Tyr Arg
            340                 345                 350

Ala Gln Glu Asp Glu Val Lys Arg Leu Lys Ser Ile Met Gly Leu Glu
        355                 360                 365
```

```
Gly Glu Asp Glu Gly Ala Ile Ser Met Leu Ser Asp Asn Thr Ala Lys
    370                 375                 380

Leu Thr Ser Ala Val Ser Ser Leu Pro Glu Leu Leu Glu Lys Lys Arg
385                 390                 395                 400

Leu Ile Asp Leu His Thr Asn Val Ala Thr Ala Val Leu Glu His Ile
                405                 410                 415

Lys Ala Arg Lys Leu Asp Val Tyr Phe Glu Tyr Glu Glu Lys Ile Met
            420                 425                 430

Ser Lys Thr Thr Leu Asp Lys Ser Leu Leu Asp Ile Ile Ser Asp Pro
        435                 440                 445

Asp Ala Gly Thr Pro Glu Asp Lys Met Arg Leu Phe Leu Ile Tyr Tyr
    450                 455                 460

Ile Ser Thr Gln Gln Ala Pro Ser Glu Ala Asp Leu Glu Gln Tyr Lys
465                 470                 475                 480

Lys Ala Leu Thr Asp Ala Gly Cys Asn Leu Asn Pro Leu Gln Tyr Ile
                485                 490                 495

Lys Gln Trp Lys Ala Phe Thr Lys Met Ala Ser Ala Pro Ala Ser Tyr
            500                 505                 510

Gly Ser Thr Thr Thr Lys Pro Met Gly Leu Leu Ser Arg Val Met Asn
        515                 520                 525

Thr Gly Ser Gln Phe Val Met Glu Gly Val Lys Asn Leu Val Leu Lys
    530                 535                 540

Gln Gln Asn Leu Pro Val Thr Arg Ile Leu Asp Asn Leu Met Glu Met
545                 550                 555                 560

Lys Ser Asn Pro Glu Thr Asp Asp Tyr Arg Tyr Phe Asp Pro Lys Met
                565                 570                 575

Leu Arg Gly Asn Asp Ser Ser Val Pro Arg Asn Lys Asn Pro Phe Gln
            580                 585                 590

Glu Ala Ile Val Phe Val Val Gly Gly Gly Asn Tyr Ile Glu Tyr Gln
        595                 600                 605

Asn Leu Val Asp Tyr Ile Lys Gly Lys Gln Gly Lys His Ile Leu Tyr
    610                 615                 620

Gly Cys Ser Glu Leu Phe Asn Ala Thr Gln Phe Ile Lys Gln Leu Ser
625                 630                 635                 640

Gln Leu Gly Gln Lys
                645
```

<210> 217
<211> 101

<212> PRT
<213> Homo sapiens

<400> 217
Gly Ala Gly Pro Ser Gln Leu Arg Leu His Tyr Pro Arg Ile Ser Met
1 5 10 15

Ala Val Arg Gln Trp Val Ile Ala Leu Ala Leu Ala Ala Leu Leu Val
20 25 30

Val Asp Arg Glu Val Pro Val Ala Ala Gly Lys Leu Pro Phe Ser Arg
35 40 45

Met Pro Ile Cys Glu His Met Val Glu Ser Pro Thr Cys Ser Gln Met
50 55 60

Ser Asn Leu Val Cys Gly Thr Asp Gly Leu Thr Tyr Thr Asn Glu Cys
65 70 75 80

Gln Leu Cys Leu Ala Arg Ile Lys Thr Lys Gln Asp Ile Gln Ile Met
85 90 95

Lys Asp Gly Lys Cys
100

<210> 218
<211> 123
<212> PRT
<213> Homo sapiens

<400> 218
Gln Leu Gly Trp Ile Phe Tyr Phe Met Ser Tyr Pro Leu His Ala His
1 5 10 15

His Cys Ser Pro Ala Asp Thr Ser Trp Leu Glu Val Leu Leu Trp Asp
20 25 30

Gln His Leu Pro Ser Phe Met Ile Trp Met Ser Cys Leu Val Phe Ile
35 40 45

Arg Ala Lys Gln Ser Trp His Ser Phe Val Tyr Val Ser Pro Ser Val
50 55 60

Pro Gln Thr Arg Leu Asp Ile Trp Glu Gln Val Gly Asp Ser Thr Met
65 70 75 80

Cys Ser Gln Met Gly Ile Leu Glu Lys Gly Ser Phe Pro Ala Ala Thr
85 90 95

Gly Thr Ser Leu Ser Thr Thr Arg Arg Ala Ala Lys Ala Arg Ala Ile
100 105 110

Thr His Trp Arg Thr Ala Met Leu Ile Leu Gly
115 120

<210> 219

<211> 64
<212> PRT
<213> Homo sapiens

<400> 219
Ile Lys Ala Lys Phe Asn Leu Asn Ala Phe Phe Phe Phe Phe Leu Leu
1 5 10 15

Arg Ser Glu Ile Gly Thr Val Ile Leu Ser Thr Glu Arg Gln Thr Ile
20 25 30

Lys Trp Ala Met Lys Gly Gly Gly Lys Val Leu Ser Ile Val Arg Gly
35 40 45

Ile Gln Pro Glu Ile Lys Pro Ile Tyr Lys His Val Cys Ser Ser Lys
50 55 60

<210> 220
<211> 67
<212> PRT
<213> Homo sapiens

<400> 220
Ser Phe Ala Ile Pro Phe Pro Trp His Cys Thr Ile Ser Pro Ile Ile
1 5 10 15

Gly Gln Ser Leu Gly Phe Leu Gly Phe Thr Met Val Ala Thr Thr Ile
20 25 30

Arg Leu Ile Asp Gly Ser Asn Leu Lys Lys Lys Val Met Val Met Asp
35 40 45

Lys Ile Ser Arg Ser Arg Glu Val Cys Tyr His Lys Ile Thr Val Ala
50 55 60

Ser Thr Ser
65

<210> 221
<211> 117
<212> PRT
<213> Homo sapiens

<400> 221
Thr Ile Ile Ser Ser Ile Thr Asp Ser Gln Leu Gln Glu Val Ala Glu
1 5 10 15

Gln Leu Glu Ile Phe Ala Ala Leu His Glu Val Leu His Ile Ile Asn
20 25 30

Asp Arg Lys Asn Leu Lys Gly Gly Leu Gln Glu Val Ala Glu Gln Leu
35 40 45

Glu Leu Glu Arg Ile Gly Pro Gln His Gln Ala Gly Ser Asp Ser Leu
50 55 60

```
Leu Thr Gly Met Ala Phe Phe Lys Met Arg Glu Met Phe Phe Glu Asp
 65                  70                  75                  80

His Ile Asp Asp Ala Lys Tyr Cys Gly His Leu Tyr Gly Leu Gly Ser
                 85                  90                  95

Gly Ser Ser Tyr Val Gln Asn Gly Thr Gly Asn Ala Tyr Glu Glu Glu
            100                 105                 110

Ala Asn Lys Gln Ser
        115
```

<210> 222
<211> 196
<212> PRT
<213> Homo sapiens

<400> 222

```
Pro Thr Cys Pro Ile Gln His Phe Ile Met Met Lys Leu Trp Val Pro
  1               5                  10                  15

Ser Arg Ser Leu Pro Asn Ser Pro Asn His Tyr Arg Ser Phe Leu Ser
            20                  25                  30

His Thr Leu His Ile Arg Tyr Asn Asn Ser Leu Phe Ile Ser Asn Thr
        35                  40                  45

His Leu Ser Arg Arg Lys Leu Arg Val Thr Asn Pro Ile Tyr Thr Arg
    50                  55                  60

Lys Arg Ser Leu Asn Ile Phe Tyr Leu Leu Ile Pro Ser Cys Arg Thr
65                  70                  75                  80

Arg Leu Ile Leu Trp Ile Ile Tyr Ile Tyr Arg Asn Leu Lys His Trp
                85                  90                  95

Ser Thr Ser Thr Val Arg Ser His Ser His Ser Ile Tyr Arg Leu Arg
            100                 105                 110

Pro Ser Met Arg Thr Asn Ile Ile Leu Arg Cys His Ser Tyr Tyr Lys
        115                 120                 125

Pro Pro Ile Ser His Pro Ile Tyr Trp Asn Asn Pro Ser Arg Met Asn
    130                 135                 140

Leu Arg Gly Leu Leu Ser Arg Gln Ser His Leu Asp Pro Ile Leu Arg
145                 150                 155                 160

Phe Pro Leu His Leu Thr Ile Tyr Tyr Arg Gly Pro Ser Asn Arg Ser
                165                 170                 175

Pro Pro Leu Pro Pro Arg Asn Arg Ile Lys Gln Pro Asn Arg Ile Lys
            180                 185                 190

Leu Arg Cys Arg
        195
```

<210> 223
<211> 174
<212> PRT
<213> Homo sapiens

<400> 223
Leu Pro Ser Ala Ile Glu Gly Pro Thr Pro Val Ser Ala Leu Leu His
1 5 10 15

Ser Ser Thr Ile Val Val Ala Gly Ile Phe Leu Leu Val Arg Phe His
20 25 30

Pro Leu Thr Thr Asn Asn Asn Phe Ile Leu Thr Thr Ile Leu Cys Leu
35 40 45

Gly Ala Leu Thr Thr Leu Phe Thr Ala Ile Cys Ala Leu Thr Gln Asn
50 55 60

Asp Ile Lys Lys Ile Ile Ala Phe Ser Thr Ser Ser Gln Leu Gly Leu
65 70 75 80

Ile Ile Val Thr Leu Gly Ile Asn Gln Pro His Leu Ala Phe Leu His
85 90 95

Ile Cys Thr His Ala Phe Phe Lys Ala Ile Leu Phe Ile Cys Ser Gly
100 105 110

Ser Ile Ile His Ser Leu Ala Asp Glu Gln Asp Ile Arg Lys Ile Gly
115 120 125

Asn Ile Thr Lys Ile Ile Pro Phe Thr Ser Ser Cys Leu Val Ile Gly
130 135 140

Ser Leu Ala Leu Thr Gly Ile Pro Phe Leu Thr Gly Phe Tyr Ser Lys
145 150 155 160

Asp Leu Ile Ile Glu Ala Ile Asn Thr Cys Asn Thr Asn Ala
165 170

<210> 224
<211> 123
<212> PRT
<213> Homo sapiens

<400> 224
Phe Leu Lys Thr Thr Ala Leu Ile Ile Ser Val Leu Gly Phe Leu Ile
1 5 10 15

Ala Leu Glu Leu Asn Asn Leu Thr Ile Lys Leu Ser Ile Asn Lys Ala
20 25 30

Asn Pro Tyr Ser Ser Phe Ser Thr Leu Leu Gly Phe Phe Pro Ser Ile
35 40 45

Ile His Arg Ile Thr Pro Ile Lys Ser Leu Asn Leu Ser Leu Lys Thr
50 55 60

```
Ser Leu Thr Leu Leu Asp Leu Ile Trp Leu Glu Lys Thr Ile Pro Lys
 65                  70                  75                  80

Ser Thr Ser Thr Leu His Thr Asn Ile Thr Thr Leu Thr Thr Asn Gln
                 85                  90                  95

Lys Gly Leu Ile Lys Leu Tyr Phe Ile Ser Phe Leu Ile Asn Ile Ile
            100                 105                 110

Leu Ile Ile Ile Leu Tyr Ser Ile Asn Leu Glu
        115                 120
```

<210> 225
<211> 129
<212> PRT
<213> Homo sapiens

<400> 225

```
Asn Met Leu Leu Ala Glu Val Arg Ile Ser Met Val Ile Arg Asn Ser
  1               5                  10                  15

Val Arg Tyr Leu Met Asn Arg Leu Met Phe Gly Ser Glu Cys Ile Tyr
            20                  25                  30

His Glu Glu Asn Cys Ile Ile Asp His Val Thr Lys Arg Ala Thr Asp
        35                  40                  45

Val Asn Arg Ile Glu Lys Lys Ser Val Leu Lys Leu Ile Leu Ser Ser
     50                  55                  60

Ile Glu Phe Met Val Thr Gln Cys Gln Val Val Ile Ile Tyr Ser Ile
 65                  70                  75                  80

Leu Leu Trp Lys Asn Ile Asn Arg Gly Lys Arg Leu Ile Met Lys Glu
                 85                  90                  95

Asn Leu Ile Asp Val Val Val Tyr Ser Gly Lys Leu Met Cys Leu Ile
            100                 105                 110

Arg Phe Asp Ile Glu Ile Arg Ile Gly Asp Ser Arg Arg Met Lys Ile
        115                 120                 125

Lys
```

<210> 226
<211> 83
<212> PRT
<213> Homo sapiens

<400> 226

```
Phe Phe Phe Phe Phe Phe Phe Ala Ile Gln Met Asn Val Tyr Phe Leu
  1               5                  10                  15

Asn Pro His Arg Val Arg Ala Glu Leu Arg Asp Ala Trp His Ser Ile
            20                  25                  30
```

```
Ser His Pro Gly Ser Leu Pro Arg Ser Phe Phe Phe Ala Gly Ser Ile
         35                  40                  45

Leu Asp Leu Tyr His Phe Leu Gln Arg Gln Tyr Pro Glu Trp Gln Ser
     50                  55                  60

Gln Val Tyr Phe Lys Val Gly Val Phe Ser Gly Ser Arg Gly Asp Trp
 65                  70                  75                  80

Ile Pro Ser
```

<210> 227
<211> 122
<212> PRT
<213> Homo sapiens

<400> 227

```
Ser Met Met Leu Phe Lys Val Leu Val Ile Thr Val Phe Cys Gly Leu
  1               5                  10                  15

Thr Val Ala Phe Pro Leu Ser Glu Leu Val Ser Ile Asn Lys Glu Leu
             20                  25                  30

Gln Asn Ser Ile Ile Asp Leu Leu Asn Ser Val Phe Asp Gln Leu Gly
         35                  40                  45

Ser Tyr Arg Gly Thr Lys Ala Pro Leu Glu Asp Tyr Thr Asp Asp Asp
     50                  55                  60

Leu Ser Thr Asp Ser Glu Gln Ile Met Asp Phe Thr Pro Ala Ala Asn
 65                  70                  75                  80

Lys Gln Asn Ser Glu Phe Ser Thr Asp Val Glu Thr Val Ser Ser Gly
                 85                  90                  95

Phe Leu Glu Glu Phe Thr Glu Asn Thr Asp Ile Thr Val Lys Ile Pro
            100                 105                 110

Leu Ala Gly Asn Pro Val Ser Pro Thr Ser
        115                 120
```

<210> 228
<211> 62
<212> PRT
<213> Homo sapiens

<400> 228

```
Thr Ser Thr Thr Val Phe Phe Phe Pro Phe His Leu Ser Leu Pro Val
  1               5                  10                  15

Gly Cys Thr Val Cys Ser His Ala Leu Cys Ile Asn Ile Leu Glu Ile
             20                  25                  30

Tyr Arg Ser Val Leu Tyr Phe Leu Tyr Cys Trp Ile Leu Ile Ile Lys
         35                  40                  45
```

```
Thr Phe Thr Arg Val Leu Asn Lys Ser Ser Leu Thr Arg Lys
     50                  55                  60


<210> 229
<211> 99
<212> PRT
<213> Homo sapiens

<400> 229
Ala Arg Pro Cys Met Asn Ser Thr Lys Ala Leu Pro His Gly Arg Glu
  1               5                  10                  15

His Thr Arg Leu Lys Met Leu Ser Tyr Leu Lys Asn Lys Met Cys Lys
             20                  25                  30

Ser Ser Gly Trp His Lys Thr Lys Val Asn Ala Ser Trp Gly Thr Phe
         35                  40                  45

Leu Arg Gly Leu Ala Glu Cys Val Asn Ile Ile Asp Phe Cys Leu Cys
     50                  55                  60

Tyr Met Thr Ser Val Thr Ser Leu Lys Ile Cys Thr Ile Gln Phe Gln
 65                  70                  75                  80

Leu Trp Ile Thr Ser Val Asp Leu Cys Glu Gly Phe Tyr Leu Cys Arg
                 85                  90                  95

Met Gly Val


<210> 230
<211> 63
<212> PRT
<213> Homo sapiens

<400> 230
Gly Glu Leu Gln Lys Ser Ser His Tyr His Pro Pro Glu Leu Phe Glu
  1               5                  10                  15

Met Ile Phe Phe Val His Phe Gly Cys Ser Ile Gly Gly Arg Ile Tyr
             20                  25                  30

Tyr Asn Met Asp His Leu Tyr Phe Cys Ile Tyr Leu Phe Ile Thr Arg
         35                  40                  45

Pro Gln Pro Gln Ser Ser Phe Ser Pro Ser Thr Ser Leu Cys Leu
     50                  55                  60


<210> 231
<211> 64
<212> PRT
<213> Homo sapiens

<400> 231
Ile Asn Lys Tyr Arg Ser Arg Asp Asp Pro Tyr Tyr Ser Ile Phe Tyr
```

```
  1               5                  10                  15

His Gln Tyr Cys Ser Gln Asn Val Gln Lys Lys Ser Phe Gln Ile Thr
            20                  25                  30

Gln Glu Asp Asp Asn Gly Trp Thr Phe Val Ile His Leu Lys Asp Cys
        35                  40                  45

Gly Arg Ala Asn Ser Thr His Cys Ile Val Cys Ala Tyr Gly Gly Leu
    50                  55                  60
```

<210> 232
<211> 88
<212> PRT
<213> Homo sapiens

<400> 232

```
Pro Leu Phe Cys Ala Ile Leu Lys Thr Cys Thr Phe Tyr Phe Ser Asp
  1               5                  10                  15

Ser Leu Thr Phe Leu Ile Glu Cys Val Leu Tyr His Ala Val Met Leu
            20                  25                  30

Trp Tyr Tyr Ser Tyr Arg Val Leu Pro Ile Leu Lys Thr Cys His Phe
        35                  40                  45

Pro Lys Arg Ser Phe Asp Ser Ala Leu Glu Val Leu His Lys Leu Lys
    50                  55                  60

Ser Leu Ser Asn Ile Asn Met Lys Gly Gly Thr Gly Cys Asn Ile Tyr
 65                  70                  75                  80

Ser Gln Val Thr Ser Leu Tyr Ile
                85
```

<210> 233
<211> 161
<212> PRT
<213> Homo sapiens

<400> 233

```
Ala Ser Thr Ile Met Asp Leu Leu Phe Gly Arg Arg Lys Thr Pro Glu
  1               5                  10                  15

Glu Leu Leu Arg Gln Asn Gln Arg Ala Leu Asn Arg Ala Met Arg Glu
            20                  25                  30

Leu Asp Arg Glu Arg Gln Lys Leu Glu Thr Gln Glu Lys Lys Ile Ile
        35                  40                  45

Ala Asp Ile Lys Lys Met Ala Lys Gln Gly Gln Met Asp Ala Val Arg
    50                  55                  60

Ile Met Ala Lys Asp Leu Val Arg Thr Arg Arg Tyr Val Arg Lys Phe
 65                  70                  75                  80
```

```
Val Leu Met Arg Ala Asn Ile Gln Ala Val Ser Leu Lys Ile Gln Thr
                 85                  90                  95

Leu Lys Ser Asn Asn Ser Met Ala Gln Ala Met Lys Gly Val Thr Lys
            100                 105                 110

Ala Met Gly Thr Met Asn Arg Gln Leu Lys Leu Pro Gln Ile Gln Lys
        115                 120                 125

Ile Met Met Glu Phe Glu Arg Gln Ala Glu Ile Met Asp Met Lys Glu
    130                 135                 140

Glu Arg Ile Glu Leu Leu His Leu Met Ile Pro Trp Val Leu Gly Lys
145                 150                 155                 160

Phe
```

<210> 234
<211> 120
<212> PRT
<213> Homo sapiens

<400> 234

```
Arg Arg Val Arg Thr Lys Ser Phe Ala Met Met Arg Thr Ala Ser Ile
  1               5                  10                  15

Trp Pro Cys Leu Ala Ile Phe Leu Met Ser Ala Met Ile Phe Phe Ser
            20                  25                  30

Trp Val Ser Ser Phe Cys Arg Ser Arg Ser Ser Ser Arg Met Ala Arg
        35                  40                  45

Phe Arg Ala Leu Trp Phe Cys Arg Ser Ser Ser Ser Gly Val Phe Arg
    50                  55                  60

Arg Pro Asn Asn Arg Ser Met Met Val Glu Ala His Trp Gln Ala Gly
65                  70                  75                  80

Ala Gly Thr Asp Thr Arg Phe Arg Phe Arg Val Thr Leu Leu Phe Leu
                85                  90                  95

Gly Ser Pro Thr Cys Pro Pro Thr Lys Ala Pro Arg Ser Cys Arg Arg
            100                 105                 110

Arg Arg Arg Phe Arg Gly Arg Val
        115                 120
```

<210> 235
<211> 121
<212> PRT
<213> Homo sapiens

<400> 235

```
Lys Leu Pro Gln Asn Pro Arg Asp His Gln Met Gln Gln Phe Asn Pro
  1               5                  10                  15
```

```
Leu Leu Leu His Ile His Asp Leu Cys Leu Pro Leu Lys Leu His His
            20                  25                  30

Asp Leu Leu Asp Leu Gly Gln Leu Gln Leu Ser Val His Gly Ala His
        35                  40                  45

Gly Leu Gly Asp Thr Leu His Gly Leu Cys His Arg Val Val Gly Leu
    50                  55                  60

Glu Cys Leu Asp Leu Glu Gly His Ser Leu Asp Val Gly Pro His Gln
65                  70                  75                  80

Tyr Lys Leu Ala His Ile Ala Pro Gly Ala His Gln Val Phe Cys His
                85                  90                  95

Asp Ala Asn Ser Ile His Leu Ala Leu Leu Gly His Leu Leu Asn Val
            100                 105                 110

Cys Asn Asp Phe Leu Leu Leu Gly Leu
        115                 120
```

<210> 236
<211> 180
<212> PRT
<213> Homo sapiens

<400> 236

```
Lys Thr Lys Arg Ser Val Lys Asp Ala Ala Lys Lys Gly Gln Lys Asp
  1               5                  10                  15

Val Cys Ile Val Leu Ala Lys Glu Met Ile Arg Ser Arg Lys Ala Val
            20                  25                  30

Ser Lys Leu Tyr Ala Ser Lys Ala His Met Asn Ser Val Leu Met Gly
        35                  40                  45

Met Lys Asn Gln Leu Ala Val Leu Arg Val Ala Gly Ser Leu Gln Lys
    50                  55                  60

Ser Thr Glu Val Met Lys Ala Met Gln Ser Leu Val Lys Ile Pro Glu
65                  70                  75                  80

Ile Gln Ala Thr Met Arg Glu Leu Ser Lys Glu Met Met Lys Ala Gly
                85                  90                  95

Ile Ile Glu Glu Met Leu Glu Asp Thr Phe Glu Ser Met Asp Asp Gln
            100                 105                 110

Glu Glu Met Glu Glu Glu Ala Glu Met Glu Ile Asp Arg Ile Leu Phe
        115                 120                 125

Glu Ile Thr Ala Gly Ala Leu Gly Lys Ala Pro Ser Lys Val Thr Asp
    130                 135                 140

Ala Leu Pro Glu Pro Glu Pro Pro Gly Ala Met Ala Ala Ser Glu Asp
145                 150                 155                 160
```

```
Glu Gly Glu Glu Glu Glu Ala Leu Glu Ala Met Gln Ser Arg Leu Ala
                165                 170                 175

Thr Leu Arg Ser
            180


<210> 237
<211> 111
<212> PRT
<213> Homo sapiens

<400> 237
Leu Met Pro Phe Gln Ser Gln Asn Leu Gln Glu Arg Trp Leu Pro Gln
  1               5                  10                  15

Arg Met Arg Gly Arg Arg Lys Arg Leu Trp Arg Pro Cys Ser Pro Gly
             20                  25                  30

Trp Pro His Ser Ala Ala Arg Gly Cys Leu Pro Arg Trp Val Cys Thr
         35                  40                  45

His Ser Ser Gln Glu Leu Pro Phe Tyr Val Ser Leu Ala Leu His Leu
     50                  55                  60

Cys Cys Glu Asp Tyr His Phe Gly Glu Gly Ser Val Cys Leu Phe Ser
 65                  70                  75                  80

Phe Ser Ala Gln Val Leu Gly Ser Gln Arg Asp Cys Ser Tyr Lys Ser
                 85                  90                  95

Gly Ile Asn Lys Cys Ile Ile Phe Arg Lys Lys Lys Lys Lys Lys
            100                 105                 110


<210> 238
<211> 103
<212> PRT
<213> Homo sapiens

<400> 238
Lys Ile Cys Glu Arg Cys Cys Gln Glu Gly Pro Glu Gly Cys Leu His
  1               5                  10                  15

Ser Ser Gly Gln Gly Asp Asp Gln Val Lys Glu Gly Cys Glu Gln Ala
             20                  25                  30

Val Cys Ile Gln Ser Thr His Glu Leu Ser Ala His Gly Asp Glu Glu
         35                  40                  45

Pro Ala Arg Gly Leu Ala Ser Gly Trp Phe Pro Ala Glu Glu His Arg
     50                  55                  60

Ser Asp Glu Gly His Ala Lys Ser Cys Glu Asp Ser Arg Asp Ser Gly
 65                  70                  75                  80

His His Glu Gly Val Val Gln Arg Asn Asp Glu Gly Trp Asp His Arg
                 85                  90                  95
```

```
Gly Asp Val Arg Gly His Phe
            100


<210> 239
<211> 351
<212> PRT
<213> Homo sapiens

<400> 239
Thr Trp Cys Thr Thr Thr Met Leu Ala Ala Arg Leu Val Cys Leu Arg
  1               5                  10                  15

Thr Leu Pro Ser Arg Val Phe His Pro Ala Phe Thr Lys Ala Ser Pro
             20                  25                  30

Val Val Lys Asn Ser Ile Thr Lys Asn Gln Trp Leu Leu Thr Pro Ser
         35                  40                  45

Arg Glu Tyr Ala Thr Lys Thr Arg Ile Gly Ile Arg Arg Gly Arg Thr
     50                  55                  60

Gly Gln Glu Leu Lys Glu Ala Ala Leu Glu Pro Ser Met Glu Lys Ile
 65                  70                  75                  80

Phe Lys Ile Asp Gln Met Gly Arg Trp Phe Val Ala Gly Gly Ala Ala
                 85                  90                  95

Val Gly Leu Gly Ala Leu Cys Tyr Tyr Gly Leu Gly Leu Ser Asn Glu
            100                 105                 110

Ile Gly Ala Ile Glu Lys Ala Val Ile Trp Pro Gln Tyr Val Lys Asp
        115                 120                 125

Arg Ile His Ser Thr Tyr Met Tyr Leu Ala Gly Ser Ile Gly Leu Thr
    130                 135                 140

Ala Leu Ser Ala Ile Ala Ile Ser Arg Thr Pro Val Leu Met Asn Phe
145                 150                 155                 160

Met Met Arg Gly Ser Trp Val Thr Ile Gly Val Thr Phe Ala Ala Met
                165                 170                 175

Val Gly Ala Gly Met Leu Val Arg Ser Ile Pro Tyr Asp Gln Ser Pro
            180                 185                 190

Gly Pro Lys His Leu Ala Trp Leu Leu His Ser Gly Val Met Gly Ala
        195                 200                 205

Val Val Ala Pro Leu Thr Ile Leu Gly Gly Pro Leu Leu Ile Arg Ala
    210                 215                 220

Ala Trp Tyr Thr Ala Gly Ile Val Gly Gly Leu Ser Thr Val Ala Met
225                 230                 235                 240

Cys Ala Pro Ser Glu Lys Phe Leu Asn Met Gly Ala Pro Leu Gly Val
                245                 250                 255
```

```
Gly Leu Gly Leu Val Phe Val Ser Ser Leu Gly Ser Met Phe Leu Pro
            260                 265                 270

Pro Thr Thr Val Ala Gly Ala Thr Leu Tyr Ser Val Ala Met Tyr Gly
        275                 280                 285

Gly Leu Val Leu Phe Ser Met Phe Leu Leu Tyr Asp Thr Gln Lys Val
    290                 295                 300

Ile Lys Arg Ala Glu Val Ser Pro Met Tyr Gly Val Gln Lys Tyr Asp
305                 310                 315                 320

Pro Ile Asn Ser Met Leu Ser Ile Tyr Met Asp Thr Leu Asn Ile Phe
                325                 330                 335

Met Arg Val Ala Thr Met Leu Ala Thr Gly Gly Asn Arg Lys Lys
            340                 345                 350


<210> 240
<211> 147
<212> PRT
<213> Homo sapiens

<400> 240
Arg Val Ala Pro Ala Thr Val Val Gly Gly Arg Asn Ile Asp Pro Asn
  1               5                  10                  15

Glu Asp Thr Lys Thr Arg Pro Arg Pro Thr Pro Arg Gly Ala Pro Met
             20                  25                  30

Phe Arg Asn Phe Ser Leu Gly Ala His Met Ala Thr Val Glu Arg Pro
         35                  40                  45

Pro Thr Met Pro Ala Val Tyr His Ala Ala Leu Met Arg Arg Gly Pro
     50                  55                  60

Pro Asn Ile Val Arg Gly Ala Thr Thr Ala Pro Ile Thr Pro Glu Cys
 65                  70                  75                  80

Ser Asn Gln Ala Arg Cys Phe Gly Pro Gly Leu Trp Ser Tyr Gly Ile
                85                  90                  95

Asp Arg Thr Ser Ile Pro Ala Pro Thr Met Ala Ala Lys Val Thr Pro
            100                 105                 110

Ile Val Thr Gln Glu Pro Leu Ile Met Lys Phe Met Arg Thr Gly Val
        115                 120                 125

Leu Leu Ile Ala Met Ala Asp Lys Ala Val Lys Pro Ile Leu Pro Ala
    130                 135                 140

Lys Tyr Ile
145


<210> 241
```

<211> 196
<212> PRT
<213> Homo sapiens

<400> 241
Lys Ala Arg Arg Arg Gly Thr Met Ala Ala Ala Ala Asp Glu Arg Ser
1 5 10 15

Pro Glu Asp Gly Glu Asp Glu Glu Glu Glu Glu Gln Leu Val Leu Val
20 25 30

Glu Leu Ser Gly Ile Ile Asp Ser Asp Phe Leu Ser Lys Cys Glu Asn
35 40 45

Lys Cys Lys Val Leu Gly Ile Asp Thr Glu Arg Pro Ile Leu Gln Val
50 55 60

Asp Ser Cys Val Phe Ala Gly Glu Tyr Glu Asp Thr Leu Gly Thr Cys
65 70 75 80

Val Ile Phe Glu Glu Asn Val Glu His Ala Asp Thr Glu Gly Asn Asn
85 90 95

Lys Thr Val Leu Lys Tyr Lys Cys His Thr Met Lys Lys Leu Ser Met
100 105 110

Thr Arg Thr Leu Leu Thr Glu Lys Lys Glu Gly Glu Glu Asn Ile Gly
115 120 125

Gly Val Glu Trp Leu Gln Ile Lys Asp Asn Asp Phe Ser Tyr Arg Pro
130 135 140

Asn Met Ile Cys Asn Phe Leu His Glu Asn Glu Asp Glu Glu Val Val
145 150 155 160

Ala Ser Ala Pro Asp Lys Ser Leu Glu Leu Glu Glu Glu Glu Ile Gln
165 170 175

Met Asn His Arg Phe Lys Pro Gly Phe Val Glu Pro Gly Glu Pro Ile
180 185 190

Ala Pro Trp Glu
195

<210> 242
<211> 156
<212> PRT
<213> Homo sapiens

<400> 242
Pro Pro Ala Pro Ala Leu Arg His Arg Glu Thr Arg Arg Pro Val Ala
1 5 10 15

Ser Leu His Val Gly Thr Gly Ala Leu Gly Ala Arg Ser His Pro Pro
20 25 30

Ala Gly Ser Arg His Leu Glu Phe Trp Gln Lys Gln Phe Ala Arg Arg

```
         35                  40                  45

Gly Ala Asp Gly Gln Glu Pro Asn Lys Leu Leu Arg Leu Gly Ala Glu
     50                  55                  60

Ala Arg Thr Gln Asp Gly Gly Ser Gly Arg Ala Trp Pro Val Thr Arg
 65                  70                  75                  80

Arg Arg Gly Ala Ala Gly Pro Trp Arg Arg Arg Arg Thr Ser Gly Val
                 85                  90                  95

Gln Arg Thr Glu Lys Thr Arg Lys Arg Arg Ser Ser Trp Phe Trp Trp
            100                 105                 110

Asn Tyr Gln Glu Leu Leu Ile Gln Thr Ser Ser Gln Asn Val Lys Ile
        115                 120                 125

Asn Ala Arg Phe Trp Ala Leu Thr Leu Arg Gly Pro Phe Cys Lys Trp
    130                 135                 140

Thr Ala Val Ser Leu Leu Gly Ser Met Lys Thr Leu
145                 150                 155


<210> 243
<211> 132
<212> PRT
<213> Homo sapiens

<400> 243
Arg Arg Leu Glu Val Ser Tyr Arg Gln His His Phe Arg Val Ser Leu
  1               5                  10                  15

Ala Pro Trp Ser Lys Met Ala Asp Glu Ala Thr Arg Arg Val Val Ser
            20                  25                  30

Glu Ile Pro Val Leu Lys Thr Asn Ala Gly Pro Arg Asp Arg Glu Leu
        35                  40                  45

Trp Val Gln Arg Leu Lys Glu Glu Tyr Gln Ser Leu Ile Arg Tyr Val
     50                  55                  60

Glu Asn Asn Lys Asn Ala Asp Asn Asp Trp Phe Arg Leu Glu Ser Asn
 65                  70                  75                  80

Lys Glu Gly Thr Arg Trp Phe Gly Lys Cys Trp Tyr Ile His Asp Leu
                 85                  90                  95

Leu Lys Tyr Glu Phe Asp Ile Glu Phe Asp Ile Pro Ile Thr Tyr Pro
            100                 105                 110

Thr Thr Ala Pro Glu Ile Ala Val Pro Glu Leu Asp Gly Lys Thr Ala
        115                 120                 125

Lys Met Tyr Arg
    130
```

<210> 244
<211> 159
<212> PRT
<213> Homo sapiens

<400> 244
Leu Phe Ala Ile Ser Tyr Ser Val Leu Pro Val His Leu Cys Cys Leu
1 5 10 15

Ser Ile Gln Leu Arg Asn Cys Asn Phe Trp Gly Ser Ser Arg Ile Cys
20 25 30

Asp Arg Asn Val Lys Leu Asp Val Lys Leu Ile Phe Gln Glu Val Met
35 40 45

Asp Ile Pro Ala Phe Ser Lys Pro Pro Ser Ser Phe Leu Val Gly Leu
50 55 60

Gln Ser Glu Pro Ile Val Val Ser Ile Leu Val Val Leu His Ile Pro
65 70 75 80

Asp Lys Gly Leu Ile Phe Leu Leu Gln Ser Leu His Pro Gln Leu Thr
85 90 95

Ile Ser Gly Ser Gly Val Ser Leu Gln His Arg Asp Leu Arg His Asn
100 105 110

Thr Ser Arg Gly Phe Ile Arg His Leu Gly Pro Gly Arg Lys Arg Asn
115 120 125

Ala Glu Val Val Leu Pro Val Ala Tyr Leu Lys Ala Pro Ser Ser Leu
130 135 140

Leu Trp Glu Asp Glu Thr Leu Gly Cys Cys Lys Thr Ser Phe Glu
145 150 155

<210> 245
<211> 103
<212> PRT
<213> Homo sapiens

<400> 245
Ala Thr Leu Pro Asp Ala Leu Pro Pro Ala Thr Lys Phe Phe Leu Lys
1 5 10 15

Ala Phe Phe Asp Ser Leu Pro Ser Pro Ile Gln Ser Tyr Leu Tyr Ile
20 25 30

Phe Ala Val Phe Pro Ser Ser Ser Gly Thr Ala Ile Ser Gly Ala Val
35 40 45

Val Gly Tyr Val Ile Gly Met Ser Asn Ser Met Ser Asn Ser Tyr Phe
50 55 60

Arg Arg Ser Trp Ile Tyr Gln His Phe Pro Asn His Arg Val Pro Ser
65 70 75 80

```
Leu Leu Asp Ser Ser Arg Asn Gln Ser Leu Ser Ala Phe Leu Leu Phe
                 85                  90                  95

Ser Thr Tyr Arg Ile Arg Asp
            100


<210> 246
<211> 285
<212> PRT
<213> Homo sapiens

<400> 246
Ala Val Arg Arg Arg Gly Ala Leu Ser Leu Ser Val Gly Ala Ala Cys
  1               5                  10                  15

Gly Leu Val Ala Leu Trp Gln Arg Arg Arg Gln Asp Ser Gly Thr Met
             20                  25                  30

Ser Gly Phe Ser Thr Glu Glu Arg Ala Ala Pro Phe Ser Leu Glu Tyr
         35                  40                  45

Arg Val Phe Leu Lys Asn Glu Lys Gly Gln Tyr Ile Ser Pro Phe His
     50                  55                  60

Asp Ile Pro Ile Tyr Ala Asp Lys Asp Val Phe His Met Val Val Glu
 65                  70                  75                  80

Val Pro Arg Trp Ser Asn Ala Lys Met Glu Ile Ala Thr Lys Asp Pro
                 85                  90                  95

Leu Asn Pro Ile Lys Gln Asp Val Lys Lys Gly Lys Leu Arg Tyr Val
            100                 105                 110

Ala Asn Leu Phe Pro Tyr Lys Gly Tyr Ile Trp Asn Tyr Gly Ala Ile
        115                 120                 125

Pro Gln Thr Trp Glu Asp Pro Gly His Asn Asp Lys His Thr Gly Cys
    130                 135                 140

Cys Gly Asp Asn Asp Pro Ile Asp Val Cys Glu Ile Gly Ser Lys Val
145                 150                 155                 160

Cys Ala Arg Gly Glu Ile Ile Gly Val Lys Val Leu Gly Ile Leu Ala
                165                 170                 175

Met Ile Asp Glu Gly Glu Thr Asp Trp Lys Val Ile Ala Ile Asn Val
            180                 185                 190

Asp Asp Pro Asp Ala Ala Asn Tyr Asn Asp Ile Asn Asp Val Lys Arg
        195                 200                 205

Leu Lys Pro Gly Tyr Leu Glu Ala Thr Val Asp Trp Phe Arg Arg Tyr
    210                 215                 220

Lys Val Pro Asp Gly Lys Pro Glu Asn Glu Phe Ala Phe Asn Ala Glu
225                 230                 235                 240
```

```
Phe Lys Asp Lys Asp Phe Ala Ile Asp Ile Ile Lys Ser Thr His Asp
                245                 250                 255

His Trp Lys Ala Leu Val Thr Lys Lys Thr Asn Gly Lys Arg Ile Met
            260                 265                 270

Leu Ile Val Gln Leu Phe Val Gly Pro Leu Lys Val Cys
        275                 280                 285
```

<210> 247
<211> 94
<212> PRT
<213> Homo sapiens

<400> 247

```
Thr Lys Gly Leu Arg Ile Ala Gln Ala Gln Leu Cys Pro Gly Ser Pro
  1               5                  10                  15

Arg Cys Arg Ser Gln Ser Ile Ser Arg Arg Ala Cys Ala Leu Cys Leu
            20                  25                  30

Arg Pro Ser Thr Gln Pro Asn Thr Thr Tyr Leu Arg Lys Pro Gly Gly
        35                  40                  45

Arg Lys Arg Ala Val Gly His Lys Ser Pro Ala Glu Thr Arg Val Pro
    50                  55                  60

Ala Ser Val Gln Arg Ser Gln Pro Pro Arg Ala His Arg Lys Ser Cys
65                  70                  75                  80

Leu Ala Ser Leu Gly Leu Cys Lys Asn Asn Lys Cys Leu Ser
                85                  90
```

<210> 248
<211> 113
<212> PRT
<213> Homo sapiens

<400> 248

```
Asp Pro Arg Pro Ser Arg Ile Gln His Ile Ser Gly Asn Pro Ala Gly
  1               5                  10                  15

Ala Ser Glu Arg Leu Ala Ile Arg Ala Gln Leu Lys Arg Glu Tyr Leu
            20                  25                  30

Leu Gln Tyr Asn Asp Pro Asn Arg Arg Gly Leu Ile Glu Asn Pro Ala
        35                  40                  45

Leu Leu Arg Trp Ala Tyr Ala Arg Thr Ile Asn Val Tyr Pro Asn Phe
    50                  55                  60

Arg Pro Thr Pro Lys Asn Ser Leu Met Gly Ala Leu Cys Gly Phe Gly
65                  70                  75                  80

Pro Leu Ile Phe Ile Tyr Tyr Ile Ile Lys Thr Glu Arg Asp Arg Lys
                85                  90                  95
```

```
Glu Lys Leu Ile Gln Glu Gly Lys Leu Asp Arg Thr Phe His Leu Ser
            100                 105                 110

Tyr


<210> 249
<211> 98
<212> PRT
<213> Homo sapiens

<400> 249
Val Phe Arg Ser Gly Ser Glu Ile Arg Ile Asp Ile Tyr Cys Ser Cys
  1               5                  10                  15

Ile Gly Pro Thr Lys Gln Gly Arg Ile Phe Asp Glu Pro Ser Ala Val
             20                  25                  30

Gly Ile Val Val Leu Lys Gln Val Leu Ser Phe Gln Leu Gly Ser Tyr
         35                  40                  45

Gly Gln Pro Leu Ala Cys Ala Arg Arg Val Ser Gly Asp Met Leu Tyr
     50                  55                  60

Ser Ala Gly Ser Arg Val Ser Gly Arg Val Arg Arg Leu Asp Gly Leu
 65                  70                  75                  80

Tyr Phe Gly Asn Asp Ile Leu Ala Asn Gln Gly Thr Ile Ala Pro Ala
                 85                  90                  95

Arg Phe


<210> 250
<211> 158
<212> PRT
<213> Homo sapiens

<400> 250
Thr Gln Val Met Val Gln Ser Met Phe Ala Pro Thr Asp Thr Ser Asp
  1               5                  10                  15

Met Glu Ala Val Trp Lys Glu Ala Lys Pro Glu Asp Leu Met Asp Ser
             20                  25                  30

Lys Leu Arg Cys Val Phe Glu Leu Pro Ala Glu Asn Asp Lys Pro His
         35                  40                  45

Asp Val Glu Ile Asn Lys Ile Ile Ser Thr Thr Ala Ser Lys Thr Glu
     50                  55                  60

Thr Pro Ile Val Ser Lys Ser Leu Ser Ser Ser Leu Asp Asp Thr Glu
 65                  70                  75                  80

Val Lys Lys Val Met Glu Glu Cys Lys Arg Leu Gln Gly Glu Val Gln
                 85                  90                  95
```

```
Arg Leu Arg Glu Glu Asn Lys Gln Phe Lys Glu Glu Asp Gly Leu Arg
            100                 105                 110

Met Arg Lys Thr Val Gln Ser Asn Ser Pro Ile Ser Ala Leu Ala Pro
        115                 120                 125

Thr Gly Lys Glu Glu Gly Leu Ser Thr Arg Leu Leu Ala Leu Val Val
    130                 135                 140

Leu Phe Phe Ile Val Gly Val Ile Ile Gly Lys Ile Ala Leu
145                 150                 155
```

<210> 251
<211> 112
<212> PRT
<213> Homo sapiens

<400> 251

```
Val Asn Lys Ala Leu Pro Phe Ile Ser Lys Ala Leu Gly Gln Ser Val
  1               5                  10                  15

Asn Thr Arg Leu Ser Leu Met Thr Ser Thr Ser Asp Ala Ala Thr Val
             20                  25                  30

Gln Phe Leu Trp Ala Ser Asp Ser Val His Gln Ser Gln Gly Ala Asp
         35                  40                  45

Gly Leu Asp Arg Thr Glu Asp Thr Glu Ser Ser Leu Gly Arg Glu Trp
     50                  55                  60

Ala Thr Trp Gly Leu Leu Cys Gly Ala Asp Arg Thr Pro Gln His Ala
 65                  70                  75                  80

Gly Leu Gln Leu Pro Lys Gly Gln His Gln Gln Ala Arg Lys Gly Val
                 85                  90                  95

Ile Leu Arg Glu Val Ile Gln His His Val Pro Arg Pro Thr Asn Val
            100                 105                 110
```

<210> 252
<211> 135
<212> PRT
<213> Homo sapiens

<400> 252

```
Ser Lys Gly Cys Ser Ile Thr Glu Thr Val Thr Val Asp Pro Gly Ser
  1               5                  10                  15

Ile Ile Pro Leu Leu Gly Leu Thr Gln Tyr Arg Arg Gly Ala Val Val
             20                  25                  30

Phe Thr Leu Lys His Thr Phe Leu Ser Asp Gly Phe Arg Asn Leu Arg
         35                  40                  45

Phe Val Val Thr Thr Ser Val Lys Gly Pro Leu Asn Leu Arg Ser Val
     50                  55                  60
```

```
Gly Gly Ser Arg Thr Arg Ile Cys Ser Ser Ser Pro Trp Pro Leu Arg
 65                  70                  75                  80

Arg Thr Pro Ser Glu Arg Gln Arg Arg Ala Gly Gly Gly Leu Leu Ala
                85                  90                  95

Gly Gly Gly Gly Arg Trp Arg Glu Gly Arg Gly Ser Glu Phe Ala Ser
            100                 105                 110

Leu Leu Phe Leu Val Arg Leu Cys Ser Thr Thr Phe Leu Cys Trp Gln
        115                 120                 125

Ile Cys Phe Gln Ile Asp Phe
    130                 135


<210> 253
<211> 189
<212> PRT
<213> Homo sapiens

<400> 253
Ser Met Gln Ser Ala Val Ser Phe Phe Phe Ser Leu Asp Gln Lys
  1               5                  10                  15

Lys Ile Cys Leu Pro Thr Ile Ser Leu Val Val Trp Pro Thr Val Thr
            20                  25                  30

Ile Phe Leu Cys Val Gln Arg His Ile Gly Phe Ala Phe Asn Asp Leu
        35                  40                  45

Leu Arg Leu Glu Asn Thr Ile Lys Thr Asn Cys Ser Ala Thr Gly Gln
     50                  55                  60

Val Val Tyr Tyr Gln Ile Ile Thr Ser Arg Cys Gln Leu His Ile Glu
 65                  70                  75                  80

Ser Phe Met Lys Phe Ile Asn Lys Glu Leu Phe Phe Leu Cys Gly Phe
                85                  90                  95

Asn Lys Ser Ser Arg Ile Val Gln Ser Leu Val Asn Val Ile Leu Ile
            100                 105                 110

Ile Pro Leu Asn Phe Ile Cys Cys Cys Tyr Leu Leu Lys Tyr Asp Leu
        115                 120                 125

Phe Arg Leu Leu Ile Pro Leu Ile Gln Glu Met Pro Arg Gly Ile Pro
    130                 135                 140

Trp Gly Asn Gly Ala Ser Tyr Ser Val Asn Phe Ser Ser Phe Thr Phe
145                 150                 155                 160

Ala Asn Ile Met Ala Glu Phe Phe Leu Ser Leu Val Arg Gln Leu Leu
                165                 170                 175

Thr Glu Phe Phe Ile Leu Thr Ile Leu Ser His Gly Ile
            180                 185
```

<210> 254
<211> 300
<212> PRT
<213> Homo sapiens

<400> 254
Lys Ser Ile Trp Lys Gln Ile Cys Gln His Lys Asn Val Val Glu Gln
1 5 10 15

Ser Leu Thr Arg Lys Arg Arg Asp Ala Asn Ser Leu Pro Leu Pro Ser
20 25 30

Arg His Arg Pro Pro Pro Pro Ala Ser Lys Pro Pro Pro Ala Leu Arg
35 40 45

Cys Leu Ser Asp Gly Val Arg Leu Arg Gly His Gly Glu Asp Glu Gln
50 55 60

Ile Leu Val Leu Asp Pro Pro Thr Asp Leu Lys Phe Lys Gly Pro Phe
65 70 75 80

Thr Asp Val Val Thr Thr Asn Leu Lys Leu Arg Asn Pro Ser Asp Arg
85 90 95

Lys Val Cys Phe Lys Val Lys Thr Thr Ala Pro Arg Arg Tyr Cys Val
100 105 110

Arg Pro Asn Ser Gly Ile Ile Asp Pro Gly Ser Thr Val Thr Val Ser
115 120 125

Val Met Leu Gln Pro Phe Asp Tyr Asp Pro Asn Glu Lys Ser Lys His
130 135 140

Lys Phe Met Val Gln Thr Ile Phe Ala Pro Pro Asn Thr Ser Asp Met
145 150 155 160

Glu Ala Val Trp Lys Glu Ala Lys Pro Asp Glu Leu Met Asp Ser Lys
165 170 175

Leu Arg Cys Val Phe Glu Met Pro Asn Glu Asn Asp Lys Leu Asn Asp
180 185 190

Met Glu Pro Ser Lys Ala Val Pro Leu Asn Ala Ser Lys Gln Asp Gly
195 200 205

Pro Met Pro Lys Pro His Ser Val Ser Leu Asn Asp Thr Glu Thr Arg
210 215 220

Lys Leu Met Glu Glu Cys Lys Arg Leu Gln Gly Glu Met Met Lys Leu
225 230 235 240

Ser Glu Glu Asn Arg His Leu Arg Asp Glu Gly Leu Arg Leu Arg Lys
245 250 255

Val Ala His Ser Asp Lys Pro Gly Ser Thr Ser Thr Ala Ser Phe Arg
260 265 270

```
Asp Asn Val Thr Ser Pro Leu Pro Ser Leu Leu Val Val Ile Ala Ala
        275                 280                 285

Ile Phe Ile Gly Phe Phe Leu Gly Lys Phe Ile Leu
    290                 295                 300


<210> 255
<211> 247
<212> PRT
<213> Homo sapiens

<400> 255
Gly Ser Ser Gly Ser Arg Phe Glu Val Val Val Val Leu Glu Glu Arg
  1               5                  10                  15

Arg Gly Gly Arg Gly Arg Gly Met Gly Arg Gly Asp Gly Phe Asp Ser
             20                  25                  30

Arg Gly Lys Arg Glu Phe Asp Arg His Ser Gly Ser Asp Arg Ser Gly
         35                  40                  45

Leu Lys His Glu Asp Lys Arg Gly Gly Ser Gly Ser His Asn Trp Gly
     50                  55                  60

Thr Val Lys Asp Glu Leu Thr Glu Ser Pro Lys Tyr Ile Gln Lys Gln
 65                  70                  75                  80

Ile Ser Tyr Asn Tyr Ser Asp Leu Asp Gln Ser Asn Val Thr Glu Glu
                 85                  90                  95

Thr Pro Glu Gly Glu Glu His His Pro Val Ala Asp Thr Glu Asn Lys
            100                 105                 110

Glu Asn Glu Val Glu Glu Val Lys Glu Glu Gly Pro Lys Glu Met Thr
        115                 120                 125

Leu Asp Glu Trp Lys Ala Ile Gln Asn Lys Asp Arg Ala Lys Val Glu
    130                 135                 140

Phe Asn Ile Arg Lys Pro Asn Glu Gly Ala Asp Gly Gln Trp Lys Lys
145                 150                 155                 160

Gly Phe Val Leu His Lys Ser Lys Ser Glu Glu Ala His Ala Glu Asp
                165                 170                 175

Ser Val Met Asp His His Phe Arg Lys Pro Ala Asn Asp Ile Thr Ser
            180                 185                 190

Gln Leu Glu Ile Asn Phe Gly Asp Leu Gly Arg Pro Gly Arg Gly Gly
        195                 200                 205

Arg Gly Gly Arg Gly Gly Arg Gly Arg Gly Gly Arg Pro Asn Arg Gly
    210                 215                 220

Ser Arg Thr Asp Lys Ser Ser Ala Ser Ala Pro Asp Val Asp Asp Pro
225                 230                 235                 240
```

Glu Ala Phe Pro Ala Leu Ala
245

<210> 256
<211> 69
<212> PRT
<213> Homo sapiens

<400> 256
Phe Val Phe Asp Ser Ser Pro Val Val Arg Ser Ala Thr Ser Thr Phe
1 5 10 15

Val Leu Val Leu Gln Ala Arg Ser Ile Thr Ser Thr Met Pro Ile Lys
20 25 30

Phe Thr Phe Ala Thr Arg Ile Lys Ser Ile Ser Ser Ala His Ser Thr
35 40 45

Ser Thr Ala Pro Ser Thr Leu Phe Gln Asp His His Asp Leu Glu Ser
50 55 60

Arg Ala Ala Arg Ala
65

<210> 257
<211> 220
<212> PRT
<213> Homo sapiens

<400> 257
Pro Gly Arg Gly Ser Met Tyr Asp Arg Met Arg Arg Gly Gly Asp Gly
1 5 10 15

Tyr Asp Gly Gly Tyr Gly Gly Phe Asp Asp Tyr Gly Gly Tyr Asn Asn
20 25 30

Tyr Gly Tyr Gly Asn Asp Gly Phe Asp Asp Arg Met Arg Asp Gly Arg
35 40 45

Gly Met Gly Gly His Gly Tyr Gly Gly Ala Gly Asp Ala Ser Ser Gly
50 55 60

Phe His Gly Gly His Phe Val His Met Arg Gly Leu Pro Phe Arg Ala
65 70 75 80

Thr Glu Asn Asp Ile Ala Asn Phe Phe Ser Pro Leu Asn Pro Ile Arg
85 90 95

Val His Ile Asp Ile Gly Ala Asp Gly Arg Ala Thr Gly Glu Ala Asp
100 105 110

Val Glu Phe Val Thr His Glu Asp Ala Val Ala Ala Met Ser Lys Asp
115 120 125

Lys Asn Asn Met Gln His Arg Tyr Ile Glu Leu Phe Leu Asn Ser Thr

```
    130                 135                 140

Pro Gly Gly Gly Ser Gly Met Gly Gly Ser Gly Met Gly Gly Tyr Gly
145                 150                 155                 160

Arg Asp Gly Met Asp Asn Gln Gly Gly Tyr Gly Ser Val Gly Arg Met
                165                 170                 175

Gly Met Gly Asn Asn Tyr Ser Gly Gly Tyr Gly Thr Pro Asp Gly Leu
            180                 185                 190

Gly Gly Tyr Gly Arg Gly Gly Gly Gly Ser Gly Gly Tyr Tyr Gly Gln
        195                 200                 205

Gly Gly Met Ser Gly Gly Gly Trp Arg Gly Met Tyr
    210                 215                 220
```

<210> 258
<211> 1105
<212> DNA
<213> Homo sapiens

<400> 258
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<213> Homo sapiens

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<213> Homo sapiens

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<212> DNA
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<213> Homo sapiens

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<211> 1836
<212> DNA
<213> Homo sapiens

<400> 270
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ctggtgcacc accaccatgt tggctgcaag gctggtgtgt ctccggacac taccttctag 180
ggttttccac ccagctttca ccaaggcctc ccctgttgtg aagaattcca tcacgaagaa 240
tcaatggctg ttaacaccta gcagggaata tgccaccaaa acaagaattg ggatccggcg 300
tgggagaact ggccaagaac tcaaagaggc agcattggaa ccatcgatgg aaaaaatatt 360
taaaattgat cagatgggaa gatggtttgt tgctggaggg gctgctgttg gtcttggagc 420
attgtgctac tatggcttgg gactgtctaa tgagattgga gctattgaaa aggctgtaat 480
ttggcctcag tatgtcaagg atagaattca ttccacctat atgtacttag cagggagtat 540
tggtttaaca gctttgtctg ccatagcaat cagcagaacg cctgttctca tgaacttcat 600
gatgagaggc tcttgggtga caattggtgt gacctttgca gccatggttg gagctggaat 660
gctggtacga tcaataccat atgaccagag cccaggccca aagcatcttg cttggttgct 720
acattctggt gtgatgggtg cagtggtggc tcctctgaca atattagggg gtcctcttct 780
catcagagct gcatggtaca cagctggcat tgtgggaggc ctctccactg tggccatgtg 840
tgcgcccagt gaaaagtttc tgaacatggg tgcacccctg ggagtgggcc tgggtctcgt 900
ctttgtgtcc tcattgggat ctatgtttct tccacctacc accgtggctg gtgccactct 960
ttactcagtg gcaatgtacg gtggattagt tcttttcagc atgttccttc tgtatgatac 1020
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cattaactcg atgctgagta tctacatgga tacattaaat atatttatgc gagttgcaac 1140
tatgctggca actggaggca acagaaagaa atgaagtgac tcagcttctg gcttctctgc 1200
tacatcaaat atcttgttta atggggcaga tatgcattaa atagtttgta caagcagctt 1260
tcgttgaagt ttagaagata agaaacatgt catcatattt aaatgttccg gtaatgtgat 1320
gcctcaggtc tgccttttt tctggagaat aaatgcagta atcctctccc aaataagcac 1380
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aagtttgtgt catgagaatg taagtctttt ttctacttta aaatttagta ggttcactga 1500
gtaactaaaa tttagcaaac ctgtgtttgc atatttttt ggagtgcaga atattgtaat 1560
taatgtcata agtgatttgg agctttggta aagggaccag agagaaggag tcacctgcag 1620
tcttttgttt ttttaaatac ttagaactta gcacttgtgt tattgattag tgaggagcca 1680
gtaagaaaca tctgggtatt tggaaacaag tggtcattgg ttacattcat ctgctgaact 1740
taacaaaact ggttccatcc tggaacaggg cacaggtgaa tgcattcctc ctgcggttgg 1800
ctccccagtg gcccgccttc ccatatagga tgtggg 1836

<210> 271
<211> 1220
<212> DNA
<213> Homo sapiens

<400> 271
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atataggacg gagtaatctg tttacattct gttcttctcg atgcactcac aagcgggtaa 180
ctaggtgaca agaaaacaaa gatcttattc aaaagaggtc ttacagcaac ccaacgtctc 240
atcttcccat agtaaagatg acggcgcctt gaggtaagct acaggcaaca ccacttccgc 300
gtttctcttg cgccctggtc caagatggcg gatgaagcca cgcgacgtgt tgtgtctgag 360
atcccggtgc tgaagactaa cgccggaccc cgagatcgtg agttgtgggt gcagcgactg 420
aaggaggaat atcagtccct tatccggtat gtggagaaca acaagaatgc tgacaacgat 480
tggttccgac tggagtccaa caaggaagga actcggtggt ttggaaaatg ctggtatatc 540
catgacctcc tgaaatatga gtttgacatc gagtttgaca ttcctatcac atatcctact 600
actgccccag aaattgcagt tcctgagctg gatggaaaga cagcaaagat gtacaggggt 660
ggcaaaatat gcctgacgga tcatttcaaa cctttgtggg ccaggaatgt gcccaaattt 720
ggactagctc atctcatggc tctggggctg ggtccatggc tggcagtgga aatccctgat 780
ctgattcaga agggcgtcat ccaacacaaa gagaaatgca accaatgaag aatcaagcca 840
ctgaggcagg gcagagggac ctttgatagg ctacgatact attttcctgt gcatcacact 900
taactcatct aactgcttcc ccggacaccc tccacctcta gttgttacta agtagctgca 960
gtaggcattg ctggggaaga aacaaacaca caccaaacag tactgctact tagtttctaa 1020
ggctgcacag ggaagggaaa gactgggctt tggacaatct agaggtaatt tatatccgcc 1080
cccaggtgga gcaacatgcg attctggagg cacgggggta actgaaagtg agtacatata 1140
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<210> 272
<211> 1303
<212> DNA
<213> Homo sapiens

<400> 272
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tctgtggcag cggcggcggc aggactccgg cactatgagc ggcttcagca ccgaggagcg 120
cgccgcgccc ttctccctgg agtaccgagt cttcctcaaa aatgagaaag gacaatatat 180
atctccattt catgatattc caatttatgc agataaggat gtgtttcaca tggtagttga 240
agtaccacgc tggtctaatg caaaaatgga gattgctaca aaggaccctt taaaccctat 300
taaacaagat gtgaaaaaag gaaaacttcg ctatgttgcg aatttgttcc cgtataaagg 360
atatatctgg aactatggtg ccatccctca gacttgggaa gacccagggc acaatgataa 420
acatactggc tgttgtggtg acaatgaccc aattgatgtg tgtgaaattg gaagcaaggt 480
atgtgcaaga ggtgaaataa ttggcgtgaa agttctaggc atattggcta tgattgacga 540
aggggaaacc gactggaaag tcattgccat taatgtggat gatcctgatg cagccaatta 600
taatgatatc aatgatgtca aacggctgaa acctggctac ttagaagcta ctgtggactg 660
gtttagaagg tataaggttc ctgatggaaa accagaaaat gagtttgcgt ttaatgcaga 720
atttaaagat aaggactttg ccattgatat tattaaaagc actcatgacc attggaaagc 780
attagtgact aagaaaacga atggaaaagg aatcagttgc atgaatacaa ctttgtctga 840
gagccccttc aagtgtgatc ctgatgctgc cagagccatt gtggatgctt taccaccacc 900
ctgtgaatct gcctgcacag taccaacaga cgtggataag tggttccatc accagaaaaa 960
ctaatgagat ttctctggaa tacaagctga tattgctaca tcgtgttcat ctggatgtat 1020
tagaagtaaa agtagtagct tttcaaagct ttaaatttgt agaactcatc taactaaagt 1080
aaattctgct gtgactaatc caatatactc agaatgttat ccatctaaag catttttcat 1140
atctcaacta agataacttt tagcacatgc ttaaatatca aagcagttgt catttggaag 1200
tcacttgtga atagatgtgc aaggggagca catattggat gtatatgtta ccatatgtta 1260
ggaaataaaa ttattttgct gaaacttgga aaaaaaaaaa aaa 1303

<210> 273
<211> 1568
<212> DNA
<213> Homo sapiens

<400> 273
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tggacgtgga atgggccgag gagatggatt tgattctcgt ggcaaacgtg aatttgatag 120
gcatagtgga agtgatagat ctggcctgaa gcacgaggac aaacgtggag gtagcggatc 180
tcacaactgg ggaactgtca aagacgaatt aacagagtcc cccaaataca ttcagaaaca 240
aatatcttat aattacagtg acttggatca atcaaatgtg actgaggaaa cacctgaagg 300
tgaagaacat catccagtgg cagacactga aaataaggag aatgaagttg aagaggtaaa 360
agaggagggt ccaaaagaga tgactttgga tgagtggaag gctattcaaa ataaggaccg 420
ggcaaaagta gaatttaata tccgaaaacc aaatgaaggt gctgatgggc agtggaagaa 480
gggatttgtt cttcataaat caaagagtga agaggctcat gctgaagatt cggttatgga 540
ccatcatttc cggaagccag caaatgatat aacgtctcag ctggagatca attttggaga 600
ccttggccgc ccaggacgtg gcggcagggg aggacgaggt ggacgtgggc gtggtgggcg 660
cccaaaccgt ggcagcagga ccgacaagtc aagtgcttct gctcctgatg tggatgaccc 720
agaggcattc ccagctctgg cttaactgga tgccataaga caaccctggt tcctttgtga 780
acccttctgt tcaaagcttt tgcatgctta aggattccaa acgactaaga aattaaaaaa 840
aaaaagactg tcattcatac cattcacacc taaagactga attttatctg ttttaaaaat 900
gaacttctcc cgctacacag aagtaacaaa tatggtagtc agttttgtat ttagaaatgt 960
attggtagca gggatgtttt cataattttc agagattatg cattcttcat gaatactttt 1020
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cagtttaaag ctttcacttc atttgtgttt tttaattaag gatttagaag ttcccccaat 1140
tacaaactgg ttttaaatat tggacatact ggttttaata cctgctttgc atattcacac 1200
atggtcaact gggacatgtt aaactttgat ttgtcaaatt ttatgctgtg tggaatacta 1260
actatatgta ttttaactta gttttaatat tttcattttt ggggaaaaat ctttttttcac 1320
ttctcatgat agctgttata tatatatgct aaatctttat atacagaaat atcagtactt 1380
gaacaaattc aaagcacatt tggtttatta acccgtggct gccctggcat ggggcccatt 1440
tggggtccaa attataactg atttacattt tcagcgatat tacttttaaa tgcctgagtt 1500
cccatttaaa atctaactag acacctaatg gggaagtggt taaccactat gtggtagcca 1560
cgggccag 1568

<210> 274
<211> 144
<212> PRT
<213> Homo sapiens

<400> 274
Lys Gln Val Lys Cys Ala Lys Val Ser Tyr Leu Leu Phe Leu Phe Gln
1 5 10 15

Tyr Cys Ala Ile Asp Ser Cys Ile Lys Phe Trp Asn Ala Gly Ser Ser
20 25 30

Trp Leu Ser Ser Val Thr Leu Trp Ser Met Ser Ser Val Ser Leu Ser
35 40 45

Ala Ser Asn Val Gly Arg Val Arg Ile Lys Ser Glu Gly Cys Ser Thr
50 55 60

Gly Asp Lys Leu Ser Leu Gly Val Pro Ala Ser Lys Ala Thr Glu Pro
65 70 75 80

```
Ile Ser Phe Arg Arg Arg Ser Ser Cys Ser Leu Cys Cys Trp Leu Ser
                 85                  90                  95

Ala Leu Ala Ser Asp Phe Phe Arg Arg Ser Tyr Ser Gly Arg Tyr Ser
            100                 105                 110

Leu Ser Tyr Ser Ser Ala Ala Leu Val Thr Cys Thr Lys Ser Ser Ser
        115                 120                 125

Asn Pro Val Pro Arg Thr Ala Glu Thr Pro Thr Thr Leu Ser Glu Leu
    130                 135                 140
```

<210> 275
<211> 143
<212> PRT
<213> Homo sapiens

<400> 275

```
Met Ser Leu Val Leu Asp Glu Phe Tyr Ser Ser Leu Arg Val Val Gly
  1               5                  10                  15

Val Ser Ala Val Leu Gly Thr Gly Leu Asp Glu Leu Phe Val Gln Val
             20                  25                  30

Thr Ser Ala Ala Glu Glu Tyr Glu Arg Glu Tyr Arg Pro Glu Tyr Glu
         35                  40                  45

Arg Leu Lys Lys Ser Leu Ala Asn Ala Glu Ser Gln Gln Gln Arg Glu
     50                  55                  60

Gln Leu Glu Arg Leu Arg Lys Asp Met Gly Ser Val Ala Leu Asp Ala
 65                  70                  75                  80

Gly Thr Pro Lys Asp Ser Leu Ser Pro Val Leu His Pro Ser Asp Leu
                 85                  90                  95

Ile Leu Thr Arg Pro Thr Leu Glu Ala Asp Ser Asp Thr Asp Asp Ile
            100                 105                 110

Asp His Arg Val Thr Glu Glu Ser His Glu Glu Pro Ala Phe Gln Asn
        115                 120                 125

Phe Met Gln Glu Ser Met Ala Gln Tyr Trp Lys Arg Asn Asn Lys
    130                 135                 140
```

<210> 276
<211> 181
<212> PRT
<213> Homo sapiens

<400> 276

```
Ile Pro Asn Met Ala Ala Pro Leu Gly Gly Met Phe Ser Gly Gln Pro
  1               5                  10                  15

Pro Gly Pro Pro Gln Ala Pro Pro Gly Leu Pro Gly Gln Ala Ser Leu
             20                  25                  30
```

```
Leu Gln Ala Ala Pro Gly Ala Pro Arg Pro Ser Ser Ser Thr Leu Val
         35                  40                  45

Asp Glu Leu Glu Ser Ser Phe Glu Ala Cys Phe Ala Ser Leu Val Ser
     50                  55                  60

Gln Asp Tyr Val Asn Gly Thr Asp Gln Glu Glu Ile Arg Thr Gly Val
 65                  70                  75                  80

Asp Gln Cys Ile Gln Lys Phe Leu Asp Ile Ala Arg Gln Thr Glu Cys
                 85                  90                  95

Phe Phe Leu Gln Lys Arg Leu Gln Leu Ser Val Gln Lys Pro Glu Gln
            100                 105                 110

Val Ile Lys Glu Asp Val Ser Glu Leu Arg Asn Glu Leu Gln Arg Lys
        115                 120                 125

Asp Ala Leu Val Gln Lys His Leu Thr Lys Leu Arg His Trp Gln Gln
    130                 135                 140

Val Leu Glu Asp Ile Asn Val Gln His Lys Lys Pro Ala Asp Ile Pro
145                 150                 155                 160

Gln Gly Ser Leu Ala Tyr Leu Glu Gln Ala Ser Ala Asn Ile Pro Ala
                165                 170                 175

Pro Leu Lys Pro Thr
            180
```

<210> 277
<211> 89
<212> PRT
<213> Homo sapiens

<400> 277

```
Asn Glu Leu Ile Ile Trp Gln Arg Val Leu Pro Lys Cys Gln Val His
  1               5                  10                  15

Arg Lys Glu Cys Val Ala Asn Leu Thr His Gln Pro Thr His Arg Pro
            20                  25                  30

Thr Ala Ser Ala Leu Cys Ser Arg Trp Leu Gln Arg Cys Arg Asp Val
        35                  40                  45

Gly Arg Cys Leu Leu Gln Val Gly Gln Gly Ala Leu Arg Asp Val Gly
    50                  55                  60

Gly Leu Phe Val Leu His Val Asp Val Leu Gln His Leu Leu Pro Met
 65                  70                  75                  80

Pro Gln Leu Cys Gln Val Leu Leu Asp
                85
```

<210> 278

<211> 401
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (393)
<223> Variable amino acid

<400> 278

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Met Pro Asn Phe Cys Ala Ala Pro Asn Cys Thr Arg Lys Ser Thr Gln
  1               5                  10                  15

Ser Asp Leu Ala Phe Phe Arg Phe Pro Arg Asp Pro Ala Arg Cys Gln
             20                  25                  30

Lys Trp Val Glu Asn Cys Arg Arg Ala Asp Leu Glu Asp Lys Thr Pro
         35                  40                  45

Asp Gln Leu Asn Lys His Tyr Arg Leu Cys Ala Lys His Phe Glu Thr
     50                  55                  60

Ser Met Ile Cys Arg Thr Ser Pro Tyr Arg Thr Val Leu Arg Asp Asn
 65                  70                  75                  80

Ala Ile Pro Thr Ile Phe Asp Leu Thr Ser His Leu Asn Asn Pro His
                 85                  90                  95

Ser Arg His Arg Lys Arg Ile Lys Glu Leu Ser Glu Asp Glu Ile Arg
            100                 105                 110

Thr Leu Lys Gln Lys Lys Ile Asp Glu Thr Ser Glu Gln Glu Gln Lys
        115                 120                 125

His Lys Glu Thr Asn Asn Ser Asn Ala Gln Asn Pro Ser Glu Glu Glu
    130                 135                 140

Gly Glu Gly Gln Asp Glu Asp Ile Leu Pro Leu Thr Leu Glu Glu Lys
145                 150                 155                 160

Glu Asn Lys Glu Tyr Leu Lys Ser Leu Phe Glu Ile Leu Ile Leu Met
                165                 170                 175

Gly Lys Gln Asn Ile Pro Leu Asp Gly His Glu Ala Asp Glu Ile Pro
            180                 185                 190

Glu Gly Leu Phe Thr Pro Asp Asn Phe Gln Ala Leu Leu Glu Cys Arg
        195                 200                 205

Ile Asn Ser Gly Glu Glu Val Leu Arg Lys Arg Phe Glu Thr Thr Ala
    210                 215                 220

Val Asn Thr Leu Phe Cys Ser Lys Thr Gln Gln Arg Gln Met Leu Glu
225                 230                 235                 240

Ile Cys Glu Ser Cys Ile Arg Glu Glu Thr Leu Arg Glu Val Arg Asp
                245                 250                 255
```

```
Ser His Phe Phe Ser Ile Ile Thr Asp Asp Val Val Asp Ile Ala Gly
            260                 265                 270

Glu Glu His Leu Pro Val Leu Val Arg Phe Val Asp Glu Ser His Asn
        275                 280                 285

Leu Arg Glu Glu Phe Ile Gly Phe Leu Pro Tyr Glu Ala Asp Ala Glu
    290                 295                 300

Ile Leu Ala Val Lys Phe His Thr Met Ile Thr Glu Lys Trp Gly Leu
305                 310                 315                 320

Asn Met Glu Tyr Cys Arg Gly Gln Ala Tyr Ile Val Ser Ser Gly Phe
                325                 330                 335

Ser Ser Lys Met Lys Val Val Ala Ser Arg Leu Leu Glu Lys Tyr Pro
            340                 345                 350

Gln Ala Ile Tyr Thr Leu Cys Ser Ser Cys Ala Leu Asn Met Trp Leu
        355                 360                 365

Ala Lys Ser Val Pro Val Met Gly Val Ser Val Ala Leu Gly Thr Ile
    370                 375                 380

Glu Glu Val Cys Ser Phe Phe His Xaa Ile Thr Thr Thr Ala Phe Arg
385                 390                 395                 400

Thr
```

<210> 279
<211> 106
<212> PRT
<213> Homo sapiens

<220>
<221> MOD_RES
<222> (17)..(18)
<223> Variable amino acid

<400> 279

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Met Leu Ile Ser Gly Thr Leu Ser His Gly Thr Thr Gln Ile Gln Tyr
  1               5                  10                  15

Xaa Xaa Glu Glu His His Ala Asp Met Tyr Arg Ser Asp Leu Pro Asn
             20                  25                  30

Pro Asp Thr Leu Ser Ala Glu Leu His Cys Trp Arg Ile Lys Trp Lys
         35                  40                  45

His Arg Gly Lys Asp Ile Glu Leu Pro Ser Thr Ile Tyr Glu Ala Leu
     50                  55                  60

His Leu Pro Asp Ile Lys Phe Phe Pro Asn Val Tyr Ala Leu Leu Lys
 65                  70                  75                  80

Val Leu Cys Ile Leu Pro Val Met Lys Val Glu Asn Glu Arg Tyr Glu
                 85                  90                  95
```

```
Asn Gly Thr Lys Ala Ser Leu Lys His Ile
            100                 105


<210> 280
<211> 398
<212> PRT
<213> Homo sapiens

<400> 280
Gly Arg Lys Cys Asn Lys Phe Trp Asp Asn Ala Gln Thr Ser Gly Ile
  1               5                  10                  15

Glu Glu Pro Ser Glu Thr Lys Gly Ser Met Gln Lys Ser Lys Phe Lys
             20                  25                  30

Tyr Lys Leu Val Pro Glu Glu Glu Thr Thr Ala Ser Glu Asn Thr Glu
         35                  40                  45

Ile Thr Ser Glu Arg Gln Lys Glu Gly Ile Lys Leu Thr Ile Arg Ile
     50                  55                  60

Ser Ser Arg Lys Lys Lys Pro Asp Ser Pro Pro Lys Val Leu Glu Pro
 65                  70                  75                  80

Glu Asn Lys Gln Glu Lys Thr Glu Lys Glu Glu Glu Lys Thr Asn Val
                 85                  90                  95

Gly Arg Thr Leu Arg Arg Ser Pro Arg Ile Ser Arg Pro Thr Ala Lys
            100                 105                 110

Val Ala Glu Ile Arg Asp Gln Lys Ala Asp Lys Lys Arg Gly Glu Gly
        115                 120                 125

Glu Asp Glu Val Glu Glu Glu Ser Thr Ala Leu Gln Lys Thr Asp Lys
    130                 135                 140

Lys Glu Ile Leu Lys Lys Ser Glu Lys Asp Thr Asn Ser Lys Val Ser
145                 150                 155                 160

Lys Val Lys Pro Lys Gly Lys Val Arg Trp Thr Gly Ser Arg Thr Arg
                165                 170                 175

Gly Arg Trp Lys Tyr Ser Ser Asn Asp Glu Ser Glu Gly Ser Gly Ser
            180                 185                 190

Glu Lys Ser Ser Ala Ala Ser Glu Glu Glu Glu Glu Lys Glu Ser Glu
        195                 200                 205

Glu Ala Ile Leu Ala Asp Asp Asp Glu Pro Cys Lys Lys Cys Gly Leu
    210                 215                 220

Pro Asn His Pro Glu Leu Ile Leu Leu Cys Asp Ser Cys Asp Ser Gly
225                 230                 235                 240

Tyr His Thr Ala Cys Leu Arg Pro Pro Leu Met Ile Ile Pro Asp Gly
                245                 250                 255
```

```
Glu Trp Phe Cys Pro Pro Cys Gln His Lys Leu Leu Cys Glu Lys Leu
            260                 265                 270

Glu Glu Gln Leu Gln Asp Leu Asp Val Ala Leu Lys Lys Lys Glu Arg
        275                 280                 285

Ala Glu Arg Arg Lys Glu Arg Leu Val Tyr Val Gly Ile Ser Ile Glu
    290                 295                 300

Asn Ile Ile Pro Pro Gln Glu Pro Asp Phe Ser Glu Asp Gln Glu Glu
305                 310                 315                 320

Lys Lys Lys Asp Ser Lys Lys Ser Lys Ala Asn Leu Leu Glu Arg Arg
                325                 330                 335

Ser Thr Arg Thr Arg Lys Cys Ile Ser Tyr Arg Phe Asp Glu Phe Asp
            340                 345                 350

Glu Ala Ile Asp Glu Ala Ile Glu Asp Asp Ile Lys Glu Ala Asp Gly
        355                 360                 365

Gly Gly Val Gly Arg Gly Lys Asp Ile Ser Thr Ile Thr Gly His Arg
    370                 375                 380

Gly Lys Asp Ile Ser Thr Ile Leu Asp Glu Lys Ile Ile Thr
385                 390                 395


<210> 281
<211> 198
<212> PRT
<213> Homo sapiens

<400> 281
Ser Ser Glu Lys Ser Gly Ser Cys Gly Gly Met Met Phe Ser Ile Leu
  1               5                  10                  15

Ile Pro Thr Tyr Thr Lys Arg Ser Phe Leu Arg Ser Ala Arg Ser Phe
            20                  25                  30

Phe Phe Lys Ala Thr Ser Lys Ser Cys Asn Cys Ser Ser Asn Phe Ser
        35                  40                  45

Gln Ser Ser Leu Cys Trp Gln Gly Gly Gln Asn His Ser Pro Ser Gly
    50                  55                  60

Met Ile Ile Arg Gly Gly Arg Arg Gln Ala Val Trp Tyr Pro Leu Ser
65                  70                  75                  80

Gln Glu Ser His Arg Arg Ile Ser Ser Gly Trp Phe Gly Arg Pro His
                85                  90                  95

Phe Leu His Gly Ser Ser Ser Ser Ala Arg Met Ala Ser Ser Leu Ser
            100                 105                 110

Phe Ser Ser Ser Ser Ser Glu Ala Ala Asp Asp Phe Ser Leu Pro Asp
        115                 120                 125
```

```
Pro Ser Leu Ser Ser Leu Leu Glu Tyr Phe His Leu Pro Arg Val Arg
    130                 135                 140

Glu Pro Val His Arg Thr Leu Pro Leu Gly Phe Thr Leu Leu Thr Leu
145                 150                 155                 160

Glu Phe Val Ser Phe Ser Asp Phe Phe Lys Ile Ser Phe Leu Ser Val
                165                 170                 175

Phe Cys Lys Ala Val Asp Ser Ser Ser Thr Ser Ser Ser Pro Ser Pro
            180                 185                 190

Leu Phe Leu Ser Ala Phe
        195
```

<210> 282
<211> 202
<212> PRT
<213> Homo sapiens

<400> 282

```
Gly Arg Leu Pro Phe Ser Gly Arg Gly Arg Gly Lys Lys Val Thr Ser
  1               5                  10                  15

Gly Asp Gly Val Ala Ser Leu Pro Leu Lys Leu Gly Arg Leu Phe Gly
             20                  25                  30

Gly Val Thr Arg Gly Phe Asn Met Arg Ile Glu Lys Cys Tyr Phe Cys
         35                  40                  45

Ser Gly Pro Ile Tyr Pro Gly His Gly Met Met Phe Val Arg Asn Asp
     50                  55                  60

Cys Lys Val Phe Arg Phe Cys Lys Ser Lys Cys His Lys Asn Phe Lys
 65                  70                  75                  80

Lys Lys Arg Asn Pro Arg Lys Val Arg Trp Thr Lys Ala Phe Arg Lys
                85                  90                  95

Ala Ala Gly Lys Glu Leu Thr Val Asp Asn Ser Phe Glu Phe Glu Lys
            100                 105                 110

Arg Arg Asn Glu Pro Ile Lys Tyr Gln Arg Glu Leu Trp Asn Lys Thr
        115                 120                 125

Ile Asp Ala Met Lys Arg Val Glu Glu Ile Lys Gln Lys Arg Gln Ala
    130                 135                 140

Lys Phe Ile Met Asn Arg Leu Lys Lys Asn Lys Glu Leu Gln Lys Val
145                 150                 155                 160

Gln Asp Ile Lys Glu Val Lys Gln Asn Ile His Leu Ile Arg Ala Pro
                165                 170                 175

Leu Ala Gly Lys Gly Lys Gln Leu Glu Glu Lys Met Val Gln Gln Leu
            180                 185                 190
```

```
Gln Glu Asp Val Asp Met Glu Asp Ala Pro
        195                 200


<210> 283
<211> 84
<212> PRT
<213> Homo sapiens

<400> 283
Ile Ile His Cys Lys Leu Phe Thr Ser Cys Phe Pro Glu Cys Phe Gly
  1               5                  10                  15

Pro Pro Asn Phe Ala Arg Ile Ala Leu Leu Phe Lys Val Phe Met Thr
            20                  25                  30

Phe Arg Phe Ala Lys Ser Glu His Leu Ala Ile Val Ala Asp Glu His
         35                  40                  45

His Ala Val Ser Arg Ile Asp Gly Pro Arg Thr Glu Ile Thr Leu Phe
     50                  55                  60

Asp Thr His Val Glu Pro Ala Cys Asn Pro Thr Lys Gln Thr Pro Lys
 65                  70                  75                  80

Leu Glu Arg Lys


<210> 284
<211> 206
<212> PRT
<213> Homo sapiens

<400> 284
Arg Leu Glu Pro Arg Ser Val Thr Arg Ser Arg Arg Ala Val Ser Arg
  1               5                  10                  15

Leu Ser Ala Arg Pro Gly Lys Val Ser Ala Val Met Ala Phe Leu Ala
            20                  25                  30

Ser Gly Pro Tyr Leu Thr His Gln Gln Lys Val Leu Arg Leu Tyr Lys
         35                  40                  45

Arg Ala Leu Arg His Leu Glu Ser Trp Cys Val Gln Arg Asp Lys Tyr
     50                  55                  60

Arg Tyr Phe Ala Cys Leu Met Arg Ala Arg Phe Glu Glu His Lys Asn
 65                  70                  75                  80

Glu Lys Asp Met Ala Lys Ala Thr Gln Leu Leu Lys Glu Ala Glu Glu
                85                  90                  95

Glu Phe Trp Tyr Arg Gln His Pro Gln Pro Tyr Ile Phe Pro Asp Ser
            100                 105                 110

Pro Gly Gly Thr Ser Tyr Glu Arg Tyr Asp Cys Tyr Lys Val Pro Glu
        115                 120                 125
```

```
Trp Cys Leu Asp Asp Trp His Pro Ser Glu Lys Ala Met Tyr Pro Asp
    130                 135                 140

Tyr Phe Ala Lys Arg Glu Gln Trp Lys Lys Leu Arg Arg Glu Ser Trp
145                 150                 155                 160

Glu Arg Glu Val Lys Gln Leu Gln Glu Glu Thr Pro Pro Gly Gly Pro
                165                 170                 175

Leu Thr Glu Ala Leu Pro Pro Ala Arg Lys Glu Gly Asp Leu Pro Pro
            180                 185                 190

Leu Trp Trp Tyr Ile Val Thr Arg Pro Arg Glu Arg Pro Met
        195                 200                 205


<210> 285
<211> 139
<212> PRT
<213> Homo sapiens

<400> 285
Pro Leu Val Pro Ser Phe Pro Ser Ala Val Ser Ser Thr Val Leu Ser
  1               5                  10                  15

Trp Gln Ser Asn Gln Asp Thr Leu Pro Ser Gln Lys Asp Ala Ser His
             20                  25                  30

Leu Ser Thr Ile Leu Gly Pro Cys Ser Asn Arg Ile Ser His Arg Arg
         35                  40                  45

Cys Pro Gln Glu Ser Gln Gly Arg Cys Met Ala Val Asp Ala Asp Gly
     50                  55                  60

Thr Arg Ile Leu Pro Arg Pro Pro Ser Ala Ala Gly Trp Pro Ser Pro
 65                  70                  75                  80

Tyr Pro Phe His Ser Tyr Val Leu Gln Thr Gly Leu Ser Ser Asn Lys
                85                  90                  95

Gln Ser Ile Gly Ile Cys Leu Ser Gly Arg Thr Thr Thr Arg Gly Gly
            100                 105                 110

Val Ala Pro Ala Tyr Lys Ala Ala Thr Pro Phe Ala Asp Gly Ser Gly
        115                 120                 125

Arg Val Pro Thr Pro Arg Thr Pro Leu Arg Arg
    130                 135


<210> 286
<211> 80
<212> PRT
<213> Homo sapiens

<400> 286
Leu Met Met Thr Ile Tyr Ala Leu Ser Asn Glu Phe Ala Phe Lys Ile
```

```
  1               5                  10                  15

Asn Glu Glu Gln Leu Ser Phe Phe Pro Leu Leu Ser Val Gln Leu Trp
             20                  25                  30

His Ala Gln Arg Phe Leu Leu Asp Ser Ser Trp Ser Gly Val Ile Pro
         35                  40                  45

Phe Phe Phe Ser Cys Ser Cys Leu Pro Phe Leu Tyr Pro Pro Arg Trp
     50                  55                  60

Arg Gln Ile His Asp Leu Lys Asp Thr Gln Tyr Leu Leu Asn Ser Ser
 65                  70                  75                  80
```

<210> 287
<211> 80
<212> PRT
<213> Homo sapiens

<400> 287

```
Leu Met Met Thr Ile Tyr Ala Leu Ser Asn Glu Phe Ala Phe Lys Ile
  1               5                  10                  15

Asn Glu Glu Gln Leu Ser Phe Phe Pro Leu Leu Ser Val Gln Leu Trp
             20                  25                  30

His Ala Gln Arg Phe Leu Leu Asp Ser Ser Trp Ser Gly Val Ile Pro
         35                  40                  45

Phe Phe Phe Ser Cys Ser Cys Leu Pro Phe Leu Tyr Pro Pro Lys Trp
     50                  55                  60

Arg Gln Ile His Asp Leu Lys Asp Thr Gln Tyr Leu Leu Asn Ser Ser
 65                  70                  75                  80
```

<210> 288
<211> 206
<212> PRT
<213> Homo sapiens

<400> 288

```
Arg Leu Ser Cys Ala Gly Thr Leu Ser Gly Ser Gly Pro His Pro Ser
  1               5                  10                  15

Arg Arg Leu Thr Gln Gly Arg Trp Val Arg Lys Ser Arg Val Ala Met
             20                  25                  30

Glu Lys Ile Pro Val Ser Ala Phe Leu Leu Leu Val Ala Leu Ser Tyr
         35                  40                  45

Thr Leu Ala Arg Asp Thr Thr Val Lys Pro Gly Ala Lys Lys Asp Thr
     50                  55                  60

Lys Asp Ser Arg Pro Lys Leu Pro Gln Thr Leu Ser Arg Gly Trp Gly
 65                  70                  75                  80
```

```
Asp Gln Leu Ile Trp Thr Gln Thr Tyr Glu Glu Ala Leu Tyr Lys Ser
                 85                  90                  95

Lys Thr Ser Asn Lys Pro Leu Met Ile Ile His His Leu Asp Glu Cys
            100                 105                 110

Pro His Ser Gln Ala Leu Lys Lys Val Phe Ala Glu Asn Lys Glu Ile
        115                 120                 125

Gln Lys Leu Ala Glu Gln Phe Val Leu Leu Asn Leu Val Tyr Glu Thr
    130                 135                 140

Thr Asp Lys His Leu Ser Pro Asp Gly Gln Tyr Val Pro Arg Ile Met
145                 150                 155                 160

Phe Val Asp Pro Ser Leu Thr Val Arg Ala Asp Ile Thr Gly Arg Tyr
                165                 170                 175

Ser Asn Arg Leu Tyr Ala Tyr Glu Pro Ala Asp Thr Ala Leu Leu Leu
            180                 185                 190

Asp Asn Met Lys Lys Ala Leu Lys Leu Leu Lys Thr Glu Leu
        195                 200                 205


<210> 289
<211> 77
<212> PRT
<213> Homo sapiens

<400> 289
Gly Asn Pro Glu Leu Pro Trp Arg Lys Phe Gln Cys Gln His Ser Cys
  1               5                  10                  15

Ser Leu Trp Pro Ser Pro Thr Leu Trp Pro Glu Ile Pro Gln Ser Asn
             20                  25                  30

Leu Glu Pro Lys Arg Thr Gln Arg Thr Leu Asp Pro Asn Cys Pro Arg
         35                  40                  45

Pro Ser Pro Glu Val Gly Val Thr Asn Ser Ser Gly Leu Arg His Met
     50                  55                  60

Lys Lys Leu Tyr Ile Asn Pro Arg Gln Ala Thr Asn Pro
 65                  70                  75


<210> 290
<211> 160
<212> PRT
<213> Homo sapiens

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<400> 290
Gly Gly Xaa Gly Xaa Gln Leu Leu Xaa Pro Xaa Ala Xaa Gln Gly Xaa
1 5 10 15

Pro Ala Ala Ser Cys Xaa Xaa Gln Asp Val His Leu Xaa Arg Cys Xaa
20 25 30

Thr Val Val Arg Trp Tyr Gln Arg Ile Thr Gly Met Pro Xaa Xaa Ala
35 40 45

Pro Thr Arg Asn Phe Ser Lys Phe Gln Arg Xaa Val Met Asp Leu His
50 55 60

Gly Phe Pro Lys Glu Xaa Gly Gln Xaa Glu Xaa Gln Glu Xaa Leu Gln
65 70 75 80

Trp Glu Gly Arg Ser Ser Ser Gly Lys Cys Arg Ile Ser Xaa Ser Xaa
85 90 95

Leu Pro Xaa Ser Thr Ile Xaa Xaa Phe Leu Lys Xaa Xaa Trp Xaa Xaa
100 105 110

Ile Arg Xaa Gln Ser Pro Xaa Thr Trp Xaa Arg Thr Tyr Leu Arg Leu
115 120 125

Gly Ser Ile Ser Glu Phe Ser Pro Gly Ser Cys Leu Pro Asn Trp Leu
130 135 140

Glu Gly Lys Pro Arg Met Thr Xaa Ala Lys Trp Pro Lys Phe Phe Leu
145 150 155 160

<210> 291
<211> 150
<212> PRT
<213> Homo sapiens

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<400> 291
Arg His Xaa Pro Leu Xaa Leu Gly Xaa His Gly His Arg Ala His Ser
1 5 10 15

Cys Leu Gly Trp Ser Gln Xaa Ala Leu Trp Asp Xaa Ala Trp Gly Leu
20 25 30

Xaa Xaa Xaa Gly Ser Xaa Gln Xaa Arg Lys Lys Glu Ala Xaa Trp Cys
35 40 45

Val Xaa Val Gly Xaa Val Gly Xaa Cys Xaa Xaa Pro Xaa Glu Xaa Met
50 55 60

Xaa Xaa Gly Phe Glu Gln Asn Xaa Xaa Gly Pro Xaa Asn Xaa Xaa Val
65 70 75 80

Ser Xaa Leu Gly Xaa Xaa Xaa Trp Asn Arg Xaa Ala Glu Lys Asn Met
85 90 95

Xaa Gly Cys Cys Ala Lys Xaa Val Asn Xaa Xaa Met Asp His Xaa Xaa
100 105 110

Gly Phe Gln Xaa Arg Gln Ile Arg Gly Leu Cys Ser His Ala His Thr
115 120 125

Gly Xaa Asn Cys His Val Ser Xaa Ser Gly Ser Asp Thr Gln Leu Cys
130 135 140

Xaa Gly Leu Ser Phe Met
145 150

<210> 292
<211> 86
<212> PRT
<213> Homo sapiens

<400> 292
Arg Ala Ala Lys Ile Leu Lys Gly Gly Leu Gln Glu Val Ala Glu Gln
1 5 10 15

Leu Glu Leu Glu Arg Ile Gly Pro Gln His Gln Ala Gly Ser Asp Ser

```
            20                  25                  30

Leu Leu Thr Gly Met Ala Phe Phe Lys Met Arg Glu Met Phe Phe Glu
         35                  40                  45

Asp His Ile Asp Asp Ala Lys Tyr Cys Gly His Leu Tyr Gly Leu Gly
     50                  55                  60

Ser Gly Ser Ser Tyr Val Gln Asn Gly Thr Gly Asn Ala Tyr Glu Glu
 65                  70                  75                  80

Glu Ala Asn Lys Gln Ser
                 85
```

<210> 293
<211> 64
<212> PRT
<213> Homo sapiens

<400> 293

```
Ile Lys Ala Lys Phe Asn Leu Asn Ala Phe Phe Phe Phe Phe Leu Leu
  1               5                  10                  15

Arg Ser Glu Ile Gly Thr Val Ile Leu Ser Thr Glu Arg Gln Thr Ile
             20                  25                  30

Lys Trp Ala Met Lys Gly Gly Gly Lys Val Leu Ser Ile Val Arg Gly
         35                  40                  45

Ile Gln Pro Glu Ile Lys Pro Ile Tyr Lys His Val Cys Ser Ser Lys
     50                  55                  60
```

<210> 294
<211> 226
<212> PRT
<213> Homo sapiens

<400> 294

```
Ala Ser Thr Ile Met Asp Leu Leu Phe Gly Arg Arg Lys Thr Pro Glu
  1               5                  10                  15

Glu Leu Leu Arg Gln Asn Gln Arg Ala Leu Asn Arg Ala Met Arg Glu
             20                  25                  30

Leu Asp Arg Glu Arg Gln Lys Leu Glu Thr Gln Glu Lys Lys Ile Ile
         35                  40                  45

Ala Asp Ile Lys Lys Met Ala Lys Gln Gly Gln Met Asp Ala Val Arg
     50                  55                  60

Ile Met Ala Lys Asp Leu Val Arg Thr Arg Arg Tyr Val Arg Lys Phe
 65                  70                  75                  80

Val Leu Met Arg Ala Asn Ile Gln Ala Val Ser Leu Lys Ile Gln Thr
                 85                  90                  95
```

```
Leu Lys Ser Asn Asn Ser Met Ala Gln Ala Met Lys Gly Val Thr Lys
            100                 105                 110

Ala Met Gly Thr Met Asn Arg Gln Leu Lys Leu Pro Gln Ile Gln Lys
        115                 120                 125

Ile Met Met Glu Phe Glu Arg Gln Ala Glu Ile Met Asp Met Lys Glu
    130                 135                 140

Glu Met Met Asn Asp Ala Ile Asp Asp Pro Met Gly Asp Glu Glu Asp
145                 150                 155                 160

Glu Glu Glu Ser Asp Ala Val Val Ser Gln Val Leu Asp Glu Leu Gly
                165                 170                 175

Leu Ser Leu Thr Asp Glu Leu Ser Asn Leu Pro Ser Thr Gly Gly Ser
            180                 185                 190

Leu Ser Val Ala Ala Gly Gly Lys Lys Ala Glu Ala Ala Ala Ser Ala
        195                 200                 205

Leu Ala Asp Ala Asp Ala Asp Leu Glu Glu Arg Leu Lys Asn Leu Arg
    210                 215                 220

Arg Asp
225
```

<210> 295
<211> 166
<212> PRT
<213> Homo sapiens

<400> 295

```
Lys Ile Leu Gly Ile His Trp Leu Ser Arg Ser Gly Arg Gly Thr Gln
  1               5                  10                  15

Ser Leu Arg Arg Phe Leu Ser Arg Ser Ser Arg Ser Ala Ser Ala Ser
             20                  25                  30

Ala Arg Ala Glu Ala Ala Ala Ser Ala Phe Phe Pro Pro Ala Ala Thr
         35                  40                  45

Leu Ser Glu Pro Pro Val Glu Gly Arg Phe Asp Ser Ser Ser Val Arg
     50                  55                  60

Leu Ser Pro Ser Ser Ser Arg Thr Trp Asp Thr Thr Ala Ser Leu Ser
 65                  70                  75                  80

Ser Ser Ser Ser Ser Ser Pro Met Gly Ser Ser Met Ala Ser Phe Ile
                 85                  90                  95

Ile Ser Ser Phe Ile Ser Met Ile Ser Ala Cys Arg Ser Asn Ser Ile
            100                 105                 110

Met Ile Phe Trp Ile Trp Gly Asn Phe Ser Cys Leu Phe Met Val Pro
        115                 120                 125
```

```
Met Ala Leu Val Thr Pro Phe Met Ala Cys Ala Ile Glu Leu Leu Asp
    130                 135                 140

Leu Ser Val Trp Ile Leu Arg Asp Thr Ala Trp Met Leu Ala Arg Ile
145                 150                 155                 160

Asn Thr Asn Leu Arg Thr
                165
```

<210> 296
<211> 233
<212> PRT
<213> Homo sapiens

<400> 296

```
Lys Pro Glu Gly Ala Arg Arg Val Gln Phe Val Met Gly Leu Phe Gly
  1               5                  10                  15

Lys Thr Gln Glu Lys Pro Pro Lys Glu Leu Val Asn Glu Trp Ser Leu
             20                  25                  30

Lys Ile Arg Lys Glu Met Arg Val Val Asp Arg Gln Ile Arg Asp Ile
         35                  40                  45

Gln Arg Glu Glu Glu Lys Val Lys Arg Ser Val Lys Asp Ala Ala Lys
     50                  55                  60

Lys Gly Gln Lys Asp Val Cys Ile Val Leu Ala Lys Glu Met Ile Arg
 65                  70                  75                  80

Ser Arg Lys Ala Val Ser Lys Leu Tyr Ala Ser Lys Ala His Met Asn
                 85                  90                  95

Ser Val Leu Met Gly Met Lys Asn Gln Leu Ala Val Leu Arg Val Ala
            100                 105                 110

Gly Ser Leu Gln Lys Ser Thr Glu Val Met Lys Ala Met Gln Ser Leu
        115                 120                 125

Val Lys Ile Pro Glu Ile Gln Ala Thr Met Arg Glu Leu Ser Lys Glu
    130                 135                 140

Met Met Lys Ala Gly Ile Ile Glu Glu Met Leu Glu Asp Thr Phe Glu
145                 150                 155                 160

Ser Met Asp Asp Gln Glu Glu Met Glu Glu Glu Ala Glu Met Glu Ile
                165                 170                 175

Asp Arg Ile Leu Phe Glu Ile Thr Ala Gly Ala Leu Gly Lys Ala Pro
            180                 185                 190

Ser Lys Val Thr Asp Ala Leu Pro Glu Pro Glu Pro Pro Gly Ala Met
        195                 200                 205

Ala Ala Ser Glu Asp Glu Gly Glu Glu Glu Glu Ala Leu Glu Ala Met
    210                 215                 220
```

Gln Ser Arg Leu Ala Thr Leu Arg Ser
225 230

<210> 297
<211> 129
<212> PRT
<213> Homo sapiens

<400> 297
Leu Met Pro Phe Gln Ser Gln Asn Leu Gln Glu Arg Trp Leu Pro Gln
1 5 10 15

Arg Met Arg Gly Arg Arg Lys Arg Leu Trp Arg Pro Cys Ser Pro Gly
20 25 30

Trp Pro His Ser Ala Ala Arg Gly Cys Leu Pro Arg Trp Val Cys Thr
35 40 45

His Ser Ser Gln Glu Leu Pro Phe Tyr Val Ser Leu Ala Leu His Leu
50 55 60

Cys Cys Glu Asp Tyr His Phe Gly Glu Gly Ser Val Cys Leu Phe Ser
65 70 75 80

Phe Ser Ala Gln Val Leu Gly Ser Gln Arg Asp Cys Ser Tyr Lys Ser
85 90 95

Gly Ile Asn Lys Cys Ile Ile Phe Arg Ser Ile Asp Arg Tyr Ile Leu
100 105 110

Leu Trp Gly Gly Glu Arg Asn Pro Ser Ala His Glu Ala Leu Leu Lys
115 120 125

Ile

<210> 298
<211> 351
<212> PRT
<213> Homo sapiens

<400> 298
Thr Trp Cys Thr Thr Thr Met Leu Ala Ala Arg Leu Val Cys Leu Arg
1 5 10 15

Thr Leu Pro Ser Arg Val Phe His Pro Ala Phe Thr Lys Ala Ser Pro
20 25 30

Val Val Lys Asn Ser Ile Thr Lys Asn Gln Trp Leu Leu Thr Pro Ser
35 40 45

Arg Glu Tyr Ala Thr Lys Thr Arg Ile Gly Ile Arg Arg Gly Arg Thr
50 55 60

Gly Gln Glu Leu Lys Glu Ala Ala Leu Glu Pro Ser Met Glu Lys Ile
65 70 75 80

```
Phe Lys Ile Asp Gln Met Gly Arg Trp Phe Val Ala Gly Gly Ala Ala
                 85                  90                  95

Val Gly Leu Gly Ala Leu Cys Tyr Tyr Gly Leu Gly Leu Ser Asn Glu
            100                 105                 110

Ile Gly Ala Ile Glu Lys Ala Val Ile Trp Pro Gln Tyr Val Lys Asp
        115                 120                 125

Arg Ile His Ser Thr Tyr Met Tyr Leu Ala Gly Ser Ile Gly Leu Thr
    130                 135                 140

Ala Leu Ser Ala Ile Ala Ile Ser Arg Thr Pro Val Leu Met Asn Phe
145                 150                 155                 160

Met Met Arg Gly Ser Trp Val Thr Ile Gly Val Thr Phe Ala Ala Met
                165                 170                 175

Val Gly Ala Gly Met Leu Val Arg Ser Ile Pro Tyr Asp Gln Ser Pro
            180                 185                 190

Gly Pro Lys His Leu Ala Trp Leu Leu His Ser Gly Val Met Gly Ala
        195                 200                 205

Val Val Ala Pro Leu Thr Ile Leu Gly Gly Pro Leu Leu Ile Arg Ala
    210                 215                 220

Ala Trp Tyr Thr Ala Gly Ile Val Gly Gly Leu Ser Thr Val Ala Met
225                 230                 235                 240

Cys Ala Pro Ser Glu Lys Phe Leu Asn Met Gly Ala Pro Leu Gly Val
                245                 250                 255

Gly Leu Gly Leu Val Phe Val Ser Ser Leu Gly Ser Met Phe Leu Pro
            260                 265                 270

Pro Thr Thr Val Ala Gly Ala Thr Leu Tyr Ser Val Ala Met Tyr Gly
        275                 280                 285

Gly Leu Val Leu Phe Ser Met Phe Leu Leu Tyr Asp Thr Gln Lys Val
    290                 295                 300

Ile Lys Arg Ala Glu Val Ser Pro Met Tyr Gly Val Gln Lys Tyr Asp
305                 310                 315                 320

Pro Ile Asn Ser Met Leu Ser Ile Tyr Met Asp Thr Leu Asn Ile Phe
                325                 330                 335

Met Arg Val Ala Thr Met Leu Ala Thr Gly Gly Asn Arg Lys Lys
            340                 345                 350
```

<210> 299
<211> 147
<212> PRT
<213> Homo sapiens

<400> 299

```
Arg Val Ala Pro Ala Thr Val Val Gly Gly Arg Asn Ile Asp Pro Asn
  1               5                  10                  15

Glu Asp Thr Lys Thr Arg Pro Arg Pro Thr Pro Arg Gly Ala Pro Met
             20                  25                  30

Phe Arg Asn Phe Ser Leu Gly Ala His Met Ala Thr Val Glu Arg Pro
         35                  40                  45

Pro Thr Met Pro Ala Val Tyr His Ala Ala Leu Met Arg Arg Gly Pro
     50                  55                  60

Pro Asn Ile Val Arg Gly Ala Thr Thr Ala Pro Ile Thr Pro Glu Cys
 65                  70                  75                  80

Ser Asn Gln Ala Arg Cys Phe Gly Pro Gly Leu Trp Ser Tyr Gly Ile
                 85                  90                  95

Asp Arg Thr Ser Ile Pro Ala Pro Thr Met Ala Ala Lys Val Thr Pro
            100                 105                 110

Ile Val Thr Gln Glu Pro Leu Ile Met Lys Phe Met Arg Thr Gly Val
        115                 120                 125

Leu Leu Ile Ala Met Ala Asp Lys Ala Val Lys Pro Ile Leu Pro Ala
    130                 135                 140

Lys Tyr Ile
145
```

<210> 300
<211> 188
<212> PRT
<213> Homo sapiens

<400> 300

```
Arg Arg Leu Glu Val Ser Tyr Arg Gln His His Phe Arg Val Ser Leu
  1               5                  10                  15

Ala Pro Trp Ser Lys Met Ala Asp Glu Ala Thr Arg Arg Val Val Ser
             20                  25                  30

Glu Ile Pro Val Leu Lys Thr Asn Ala Gly Pro Arg Asp Arg Glu Leu
         35                  40                  45

Trp Val Gln Arg Leu Lys Glu Glu Tyr Gln Ser Leu Ile Arg Tyr Val
     50                  55                  60

Glu Asn Asn Lys Asn Ala Asp Asn Asp Trp Phe Arg Leu Glu Ser Asn
 65                  70                  75                  80

Lys Glu Gly Thr Arg Trp Phe Gly Lys Cys Trp Tyr Ile His Asp Leu
                 85                  90                  95

Leu Lys Tyr Glu Phe Asp Ile Glu Phe Asp Ile Pro Ile Thr Tyr Pro
            100                 105                 110
```

```
Thr Thr Ala Pro Glu Ile Ala Val Pro Glu Leu Asp Gly Lys Thr Ala
        115                 120                 125

Lys Met Tyr Arg Gly Gly Lys Ile Cys Leu Thr Asp His Phe Lys Pro
    130                 135                 140

Leu Trp Ala Arg Asn Val Pro Lys Phe Gly Leu Ala His Leu Met Ala
145                 150                 155                 160

Leu Gly Leu Gly Pro Trp Leu Ala Val Glu Ile Pro Asp Leu Ile Gln
                165                 170                 175

Lys Gly Val Ile Gln His Lys Glu Lys Cys Asn Gln
            180                 185


<210> 301
<211> 172
<212> PRT
<213> Homo sapiens

<400> 301
Ser Lys Phe Gly His Ile Pro Gly Pro Gln Arg Phe Glu Met Ile Arg
  1               5                  10                  15

Gln Ala Tyr Phe Ala Thr Pro Val His Leu Cys Cys Leu Ser Ile Gln
             20                  25                  30

Leu Arg Asn Cys Asn Phe Trp Gly Ser Ser Arg Ile Cys Asp Arg Asn
         35                  40                  45

Val Lys Leu Asp Val Lys Leu Ile Phe Gln Glu Val Met Asp Ile Pro
     50                  55                  60

Ala Phe Ser Lys Pro Pro Ser Ser Phe Leu Val Gly Leu Gln Ser Glu
 65                  70                  75                  80

Pro Ile Val Val Ser Ile Leu Val Val Leu His Ile Pro Asp Lys Gly
                 85                  90                  95

Leu Ile Phe Leu Leu Gln Ser Leu His Pro Gln Leu Thr Ile Ser Gly
            100                 105                 110

Ser Gly Val Ser Leu Gln His Arg Asp Leu Arg His Asn Thr Ser Arg
        115                 120                 125

Gly Phe Ile Arg His Leu Gly Pro Gly Arg Lys Arg Asn Ala Glu Val
    130                 135                 140

Val Leu Pro Val Ala Tyr Leu Lys Ala Pro Ser Ser Leu Leu Trp Glu
145                 150                 155                 160

Asp Glu Thr Leu Gly Cys Cys Lys Thr Ser Phe Glu
                165                 170


<210> 302
<211> 320
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<212> PRT
<213> Homo sapiens

<400> 302

```
Ala Val Arg Arg Arg Gly Ala Leu Ser Leu Ser Val Gly Ala Ala Cys
  1               5                  10                  15

Gly Leu Val Ala Leu Trp Gln Arg Arg Arg Gln Asp Ser Gly Thr Met
             20                  25                  30

Ser Gly Phe Ser Thr Glu Glu Arg Ala Ala Pro Phe Ser Leu Glu Tyr
         35                  40                  45

Arg Val Phe Leu Lys Asn Glu Lys Gly Gln Tyr Ile Ser Pro Phe His
     50                  55                  60

Asp Ile Pro Ile Tyr Ala Asp Lys Asp Val Phe His Met Val Val Glu
 65                  70                  75                  80

Val Pro Arg Trp Ser Asn Ala Lys Met Glu Ile Ala Thr Lys Asp Pro
                 85                  90                  95

Leu Asn Pro Ile Lys Gln Asp Val Lys Lys Gly Lys Leu Arg Tyr Val
            100                 105                 110

Ala Asn Leu Phe Pro Tyr Lys Gly Tyr Ile Trp Asn Tyr Gly Ala Ile
        115                 120                 125

Pro Gln Thr Trp Glu Asp Pro Gly His Asn Asp Lys His Thr Gly Cys
    130                 135                 140

Cys Gly Asp Asn Asp Pro Ile Asp Val Cys Glu Ile Gly Ser Lys Val
145                 150                 155                 160

Cys Ala Arg Gly Glu Ile Ile Gly Val Lys Val Leu Gly Ile Leu Ala
                165                 170                 175

Met Ile Asp Glu Gly Glu Thr Asp Trp Lys Val Ile Ala Ile Asn Val
            180                 185                 190

Asp Asp Pro Asp Ala Ala Asn Tyr Asn Asp Ile Asn Asp Val Lys Arg
        195                 200                 205

Leu Lys Pro Gly Tyr Leu Glu Ala Thr Val Asp Trp Phe Arg Arg Tyr
    210                 215                 220

Lys Val Pro Asp Gly Lys Pro Glu Asn Glu Phe Ala Phe Asn Ala Glu
225                 230                 235                 240

Phe Lys Asp Lys Asp Phe Ala Ile Asp Ile Ile Lys Ser Thr His Asp
                245                 250                 255

His Trp Lys Ala Leu Val Thr Lys Lys Thr Asn Gly Lys Gly Ile Ser
            260                 265                 270

Cys Met Asn Thr Thr Leu Ser Glu Ser Pro Phe Lys Cys Asp Pro Asp
        275                 280                 285
```

```
Ala Ala Arg Ala Ile Val Asp Ala Leu Pro Pro Pro Cys Glu Ser Ala
    290                 295                 300

Cys Thr Val Pro Thr Asp Val Asp Lys Trp Phe His His Gln Lys Asn
305                 310                 315                 320


<210> 303
<211> 85
<212> PRT
<213> Homo sapiens

<400> 303
Arg Val Leu Cys Ser Asn Leu His Phe Cys Ile Arg Pro Ala Trp Tyr
  1               5                  10                  15

Phe Asn Tyr His Val Lys His Ile Leu Ile Cys Ile Asn Trp Asn Ile
             20                  25                  30

Met Lys Trp Arg Tyr Ile Leu Ser Phe Leu Ile Phe Glu Glu Asp Ser
         35                  40                  45

Val Leu Gln Gly Glu Gly Arg Gly Ala Leu Leu Gly Ala Glu Ala Ala
     50                  55                  60

His Ser Ala Gly Val Leu Pro Pro Pro Leu Pro Gln Ser His Gln Pro
 65                  70                  75                  80

Ala Arg Gly Ala Asp
                85


<210> 304
<211> 247
<212> PRT
<213> Homo sapiens

<400> 304
Gly Ser Ser Gly Ser Arg Phe Glu Val Val Val Val Leu Glu Glu Arg
  1               5                  10                  15

Arg Gly Gly Arg Gly Arg Gly Met Gly Arg Gly Asp Gly Phe Asp Ser
             20                  25                  30

Arg Gly Lys Arg Glu Phe Asp Arg His Ser Gly Ser Asp Arg Ser Gly
         35                  40                  45

Leu Lys His Glu Asp Lys Arg Gly Gly Ser Gly Ser His Asn Trp Gly
     50                  55                  60

Thr Val Lys Asp Glu Leu Thr Glu Ser Pro Lys Tyr Ile Gln Lys Gln
 65                  70                  75                  80

Ile Ser Tyr Asn Tyr Ser Asp Leu Asp Gln Ser Asn Val Thr Glu Glu
                85                  90                  95

Thr Pro Glu Gly Glu Glu His His Pro Val Ala Asp Thr Glu Asn Lys
            100                 105                 110
```

```
Glu Asn Glu Val Glu Glu Val Lys Glu Glu Gly Pro Lys Glu Met Thr
        115                 120                 125

Leu Asp Glu Trp Lys Ala Ile Gln Asn Lys Asp Arg Ala Lys Val Glu
    130                 135                 140

Phe Asn Ile Arg Lys Pro Asn Glu Gly Ala Asp Gly Gln Trp Lys Lys
145                 150                 155                 160

Gly Phe Val Leu His Lys Ser Lys Ser Glu Glu Ala His Ala Glu Asp
                165                 170                 175

Ser Val Met Asp His His Phe Arg Lys Pro Ala Asn Asp Ile Thr Ser
            180                 185                 190

Gln Leu Glu Ile Asn Phe Gly Asp Leu Gly Arg Pro Gly Arg Gly Gly
        195                 200                 205

Arg Gly Gly Arg Gly Gly Arg Gly Arg Gly Gly Arg Pro Asn Arg Gly
    210                 215                 220

Ser Arg Thr Asp Lys Ser Ser Ala Ser Ala Pro Asp Val Asp Asp Pro
225                 230                 235                 240

Glu Ala Phe Pro Ala Leu Ala
                245
```

<210> 305
<211> 78
<212> PRT
<213> Homo sapiens

<400> 305

```
Ser Phe Gly Ile Leu Lys His Ala Lys Ala Leu Asn Arg Arg Val His
  1               5                  10                  15

Lys Gly Thr Arg Val Val Leu Trp His Pro Val Lys Pro Glu Leu Gly
            20                  25                  30

Met Pro Leu Gly His Pro His Gln Glu Gln Lys His Leu Thr Cys Arg
        35                  40                  45

Ser Cys Cys His Gly Leu Gly Ala His His Ala His Val His Leu Val
    50                  55                  60

Leu Pro Cys Arg His Val Leu Gly Gly Gln Gly Leu Gln Asn
65                  70                  75
```

<210> 306
<211> 293
<212> PRT
<213> Homo sapiens

<400> 306

```
Ala Thr Arg Gly Ala Glu Gln Asp Gly Gly Ala Ser Ala Ala Arg Pro
```

```
  1               5                  10                  15

Arg Arg Arg Trp Ala Gly Gly Leu Leu Gln Arg Ala Ala Pro Cys Ser
            20                  25                  30

Leu Leu Pro Arg Leu Arg Thr Trp Thr Ser Ser Ser Asn Arg Ser Arg
        35                  40                  45

Glu Asp Ser Trp Leu Lys Ser Leu Phe Val Arg Lys Val Asp Pro Arg
    50                  55                  60

Lys Asp Ala His Ser Asn Leu Leu Ala Lys Lys Glu Thr Ser Asn Leu
65                  70                  75                  80

Tyr Lys Leu Gln Phe His Asn Val Lys Pro Glu Cys Leu Glu Ala Tyr
                85                  90                  95

Asn Lys Ile Cys Gln Glu Val Leu Pro Lys Ile His Glu Asp Lys His
            100                 105                 110

Tyr Pro Cys Thr Leu Val Gly Thr Trp Asn Thr Trp Tyr Gly Glu Gln
        115                 120                 125

Asp Gln Ala Val His Leu Trp Arg Tyr Glu Gly Gly Tyr Pro Ala Leu
    130                 135                 140

Thr Glu Val Met Asn Lys Leu Arg Glu Asn Lys Glu Phe Leu Glu Phe
145                 150                 155                 160

Arg Lys Ala Arg Ser Asp Met Leu Leu Ser Arg Lys Asn Gln Leu Leu
                165                 170                 175

Leu Glu Phe Ser Phe Trp Asn Glu Pro Val Pro Arg Ser Gly Pro Asn
            180                 185                 190

Ile Tyr Glu Leu Arg Ser Tyr Gln Leu Arg Pro Gly Thr Met Ile Glu
        195                 200                 205

Trp Gly Asn Tyr Trp Ala Arg Ala Ile Arg Phe Arg Gln Asp Gly Asn
    210                 215                 220

Glu Ala Val Gly Gly Phe Phe Ser Gln Ile Gly Gln Leu Tyr Met Val
225                 230                 235                 240

His His Leu Trp Ala Tyr Arg Asp Leu Gln Thr Arg Glu Asp Ile Arg
                245                 250                 255

Asn Ala Ala Trp His Lys His Gly Trp Glu Glu Leu Val Tyr Tyr Thr
            260                 265                 270

Val Pro Leu Ile Gln Glu Met Glu Ser Arg Ile Met Ile Pro Leu Lys
        275                 280                 285

Thr Ser Pro Leu Gln
    290
```

<210> 307

<211> 208
<212> PRT
<213> Homo sapiens

<400> 307
Ala His Arg Asn Ser Thr Ala Leu Leu Glu Gly Arg Gly Leu Gln Trp
1 5 10 15

Asp His Asp Ser Gly Phe His Phe Leu Asn Lys Trp Asn Cys Val Ile
20 25 30

Tyr Gln Phe Leu Pro Ala Met Phe Val Pro Cys Cys Ile Pro Tyr Val
35 40 45

Phe Pro Gly Leu Lys Ile Pro Val Ser Pro Lys Met Val His His Val
50 55 60

Gln Leu Pro Asn Leu Arg Glu Glu Ser Ser Asp Gly Phe Val Thr Ile
65 70 75 80

Leu Ser Glu Ala Asp Cys Thr Ser Pro Val Ile Ala Pro Phe Asn His
85 90 95

Gly Ser Trp Ser Glu Leu Val Arg Pro Glu Phe Ile Tyr Ile Arg Ser
100 105 110

Gly Ser Trp His Arg Leu Ile Pro Glu Thr Glu Leu Gln Gln Glu Leu
115 120 125

Ile Leu Pro Gly Glu Lys His Val Thr Ser Cys Leu Thr Lys Phe Gln
130 135 140

Lys Phe Leu Ile Phe Ser Glu Phe Ile His Asp Phe Cys Glu Gly Trp
145 150 155 160

Ile Ala Ser Phe Ile Pro Pro Glu Val Asp Ser Leu Val Leu Leu Ala
165 170 175

Ile Pro Arg Val Pro Ser Pro His Gln Ser Thr Arg Val Val Phe Ile
180 185 190

Phe Val Asn Leu Trp Gln His Leu Leu Thr Asn Phe Val Val Cys Phe
195 200 205

<210> 308
<211> 13
<212> DNA
<213> Artficial Sequence

<220>
<223> Description of Artificial Sequence: Partial
cDNA sequence e.g., EST or contig S

<400> 308
gcctcaagtt atc 13

<210> 309
<211> 29
<212> DNA
<213> Artficial Sequence

<220>
<223> Description of Artificial Sequence: Consensus sequence C

<400> 309
atgtcctagc ctcaagttat cagatgcaa 29